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Frontispiece.



THE
Gentleman's Farriery:
OR, A
PRACTICAL TREATISE
ON THE
DISEASES of HORSES,

Wherein the best WRITERS on that
SUBJECT have been consulted, and

M. *La FOSSE*'s Method of TREPPANNING
Glander'd Horses,

Is particularly Considered and Improved:

ALSO,

A New Invented Method of NICKING
HORSES is recommended, with a Copper-
Plate and Description of the MACHINE.

By J. BARTLET, SURGEON.

L O N D O N:

Printed for JOHN NOURSE, Bookfeller, against
Catherine-Street, in the *Strand*; and JOSEPH POTE,
Bookfeller, at *Eton*.

MDCCLIII.

e 13

1631



L Abitur infelix studiorum, atque immemor herbæ
Victor equus, fontesque avertitur, & pede terram
Crebra ferit : demissæ aures : incertus ibidem
Sudor, & ille quidem moriturus frigidus : aret
Pellis, & ad tactum tractanti dura resistit.
Tum vero ardentes oculi ; atque attractus ab alto
Spiritus interdum gemitu gravis : imaque longo
Ilia singultu tendunt : it naribus ater
Sanguis, & obsecras fauces premit aspera lingua.

Virgil. Georgic. Lib. III.

THE PREFACE.

T*HE* author of the following treatise was induced to the undertaking, from the complaints so frequently made by gentlemen, of the obscurity, inaccuracy, and tediousness, too general among the writers on the diseases of horses. On this account he thought he should make no unacceptable present to the public, if he collected from the best authors on this subject such particular symptoms of distempers, as would lead to the discovery of the real one, and distinguish it from others of a similar nature. By a due attention to this plan, every gentleman would soon judge of the ability of his farrier, should he think proper to consult one, before he follows the directions here laid down.

WOULD these practitioners, instead of ringing the changes with a set of poultry receipts, handed down to them from their ignorant grandsires, but carefully apply themselves to this so useful and necessary branch of knowledge, and industriously collect and compare the symptoms of particular diseases, they would attain much more certainty in their practice, and of course, more safety and expedition in their cures. They would find, that a few simple medicines, judiciously directed in acute cases, would fully answer their intention, by suffering nature to co-operate with them; and that the nauseous ill-contrived drenches, so generally made use of, but too often thwart her operations, and prove of worse consequence than the disease itself.

FOR it is this knowledge of the symptoms of diseases, that distinguishes the rational physician from the empirical pretender: it is this accounts for the superior ability and judgment which appears between one physician and another; and it is hence only any progress can be
made

The PREFACE.

made in the healing art; and more particularly in the diseases of horses, as the suffering animals can only describe their pain by their gestures.

WITH what contempt and indignation then must we view the ignorant pretender, blundering about a distemper, groping in the dark, and throwing in medicines at random? And what a melancholy situation must be that of the unhappy victim? The power of nature, or strength of constitution, will now and then indeed surmount the ignorance of blunderers, and elude the force of their botch-potches; so that the doctor shall receive applauses and rewards for his imaginary skill, when he deserves ignominy and the severest censures: But what should we conclude hence? why only that some few constitutions, like some fortifications, are bomb-proof, and can support the shocks of the whole medical artillery, without blowing up.

*AND here I cannot but lament the strange supineness of many gentlemen, who, though they are real admirers of
this*

only has been spite, 'tis no wonder, as our judicious Satyrift has observed; that such shallow draughts should intoxicate the brain. But till gentlemen make this a more general study, and thereby become better judges of physical merit, we must not be surprized to find them sometimes imposed on by such conceited smatterers; whose cant, though deemed oracular by the credulous, is but too like the oracles of old, specious delusion, and vile imposition; where learned impertinence passes for sound erudition; and a barren superfluity of words, for wondrous knowledge and elocution: Thus, sounds are adopted, and mistaken for sense; and impudence and folly but too often triumph over modesty and true desert: For as the above quoted Poet justly observes:

Distrustful sense with modest caution
speaks,
But rattling nonsense in full volleys
breaks.

*BUT to return: It may be necessary to inform the reader, that as
the*

the intention of this treatise was to be as concise as possible, and intirely practical; the immediate causes within, which occasion the disorder, with the most plausible theories relative thereto, are in general omitted as precarious and delusive; for we apprehend they tend rather to confound, than improve the judgment, and obscure an art that should chiefly be founded on penetrating observation, and faithful description. Indeed the incertitude that has always appeared in these sort of conjectures, bath now fully convinced the ingenuous of their inutility, and that one Sydenham, one faithful recorder of facts, has merited more, by observing and following nature, painting to the life what his eyes saw, and fingers felt, than all the hypothetical writers united: as a proof of this, we need only recollect the numberless, ridiculous, and inconsistent theories, that have sprung up successively, and which all had their patrons for a time, but dwindled into disrepute and oblivion, in proportion to the advances of more plausible conjectures: and this probably will be the fate of all subsequent
a ones,

The PREFACE.

ones, that are not erected on the more solid basis of repeated experience, and sedulous observation.

FOR these reasons particularly, we have endeavoured to be as explicit as possible, in enumerating the symptoms, as laid down by the best authors; esteeming them to be the only true guides that can lead us to the knowledge of the disease, and consequently to the remedy. Should it be thought we have dwelt too long on this part, we must plead the importance of it for our excuse, as we apprehend, by being more concise, the work had been less valuable.

IT may not be improper here also to acquaint the reader, that this piece was originally drawn up, and intended for the author's own use, to refer to occasionally, and save the trouble of turning over on every occasion the various writers on this subject; and that having been frequently borrowed by his friends, their approbation of the plan, and request, prevailed on him to send it to the press, with some additions.
He

The PREFACE.

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He is well aware how much he exposes himself to the censure of the little criticks, and to the sneers of the malicious among his brethren; but he begs these would remember, that to write pertinently on the diseases of horses, requires more medical knowledge and study than may at first be apprehended; a parity of reasoning being requisite in treating the maladies of horses and men. And he is convinced that so nearly allied is the true art of farriery to those of physick and surgery, that it never can be perfected, but on similar principles; and of course the subject can never be so properly handled, as by those who have made those arts their study: This will evidently appear, by comparing only the two last treatises in our own language with all that have preceeded them: For though many useful observations and remedies may be picked up from Blunderville, Markham, De Grey, Solleysel, Guerinier, Soniere, &c. yet, for the most part, their method is irrational, and not founded on a thorough knowledge of the mechanism of

a 2

a horse,

THE PREFACE.

a horse, or animal oeconomy; their medicines in general are a strange compound, or jumble of various and discordant ingredients; suitable enough to the then reigning fashion of prescribing, where the false pomp of numerous ingredients enhanced their value; but by no means agreeable to later improvements, or to that just simplicity that so remarkably adorns the practice of modern physick and surgery.

THE author has no other apology to make for digesting this piece, and the observations and reflections he has interspersed throughout the whole, than his good intentions to rescue the practice of farriery out of hands that so much abuse it; and to convince gentlemen, that as it is founded on rational principles, it is neither unbecoming their notice, or unworthy their study; and he thinks he has reason, from some late attempts to hope, that it will soon become as customary for gentlemen to go through regular courses of farriery, as it is for physicians and surgeons

THE PREFACE.

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surgeons through those of chemistry and anatomy.

THE deserved reputation that Mr. GIBSON's late edition of farriery has acquired on account of the many curious observations he has made, and the accuracy with which he has described the symptoms of horses diseases, was no small inducement also to the author's consenting to this publication; as it was intended to epitomize, or rather glean from that work, and others, whatever he judged would be most useful in practice. This edition of Mr. GIBSON's is not so general and extensive as it ought to be, by reason of the number of copper-plates therein, which have so increased the price, that many care not, and indeed cannot conveniently go to the expence. We must here too gratefully acknowledge our obligations to Dr. BRACKEN's treatise on this subject, for many ingenious observations, and real improvements.

TERMS

TERMS of art, and obscurity in expression, have purposely been avoided as much as possible (though sometimes the nature of the subject has forced us to deviate from our intended plan :) For indeed we are more desirous of being intelligible to the meanest capacity, than ambitious of writing in a polish'd stile, to which we lay no pretensions; and on this account we expect some indulgence from the candid reader.

THE receipts, it is hoped, will not be thought too numerous, as their preference to each other is generally pointed out; and as the ingredients of some may not always be procurable, it was therefore thought necessary to substitute others in their stead. Besides, the difficulty that occurs in adjusting the quantities and qualities of various drugs, though a thing familiar and easy enough to one acquainted with medicine, would have greatly embarrassed the gentleman student. Should some of them be thought too expensive, we desire it may be remembered, that as we have studied

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studied to cure in the shortest method, perhaps there may be little reason for complaint in the event, especially when the expence of the dearest of them is compared with a farrier's bill: Though we have seldom directed any of this sort, without giving the common cheap forms with them; and left the alternative to the circumstance of the reader, and the value of his horse.

THE chapters on Glanders and Nicking, with the Plates and Explanations annexed, it is hoped, will prove both useful and entertaining; though we have been informed, that the operation of Trepanning Glander'd Horses, ~~was~~ attempted in England, many years before M. La Fosse's book was published; and probably was discontinued, for want of a thorough knowledge of the parts affected in this disease, or from unsuccessful trials made on horses, that might be in the last stages of this distemper, and of course from the nature of them, incurable: but the strong probability of success, in most cases, it is hoped, will now be
a suf-

a sufficient inducement to follow the method here laid down, till future experience can recommend a better; and be also a farther incentive to our industry in bringing to perfection, the cure of a disease the most nauseous, and dangerous to our horses, and that hitherto has been a reproach to the art of farriery.



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ERRATA.

PAGE 87, Line 11, after *above*, read *nervous*.
 P. 88, l. 15, for *in*, r. *on*. P. 92, l. 12, for *in-*
scrutinable, r. *inscrutable*. P. 110, l. 3, for *Turpeth*,
 r. *Turbitb*. P. 159, l. 25, for *give*, r. *gives*. P. 163,
 l. 16, for *laxative*, r. *lenitive*. P. 180, l. 10, dele
indeed. P. 228, l. 19, for *is*, r. *are*. P. 238, l. 13,
 for *is*, r. *are*.

T H E

Gentleman's Farriery, &c.

C H A P. I.

*Some General Directions in
regard to Horses.*

LET it be laid down as a general Medicines rule, to give horses as few are im- *medicines* as possible; and by no proper to means comply with the ridiculous horses in custom of some, who are frequently health. *Bleeding, Purging, and giving Balls,* though their horses are in perfect health, and have no one indication that requires such treatment.

Proper management in their *Feed-*
ing, Exercise, and Dressing, will alone
cure many disorders, and prevent most.

B

In

The Gentleman's Farriery.

Foreign-
ers depend
more on
alteratives
than purg-
ing medi-
cines.

In *France*, *Germany*, and *Denmark*, horses are seldom purged; they depend there much on *Alteratives*: the use of the liver of antimony, we have from the *French*, which is in general a good medicine for that purpose, and may, in many cases, often be substituted in the room of purging.

The best
hay should
be pro-
cured.

As *Hay* is so material an article in a horse's diet, great care should be taken to procure the best: when it is not extraordinary, the dust should be well shook out, before it is put in the rack; for such hay is very apt to breed vermin.

Beans afford the strongest nourishment of all grain, but are fittest for laborious horses; except on particular occasions.

Cautions
in the use
of bran.

Bran scalded is a kind of *Panada* to a sick horse; but nothing is worse than a too frequent use of it, either dry or scalded; for it relaxes, and weakens the bowels too much. The bots in young horses may be owing to too much musty bran and chaff,
given

The Gentleman's Farriery. 3

given with other foul feed to make them up for sale: particular care therefore should be taken that the bran be always sweet and new.

Oats, well ripened, make a more hearty and durable diet than *Barley*, and are much better suited to the constitutions of *English* horses, as appears by experience. A proper quantity of cut straw and hay mixed with them, is sometimes very useful to horses troubled with bots, indigestion, &c.

Oats, the best diet for English horses.

Horses who eat their litter, should particularly have cut straw and powdered chalk given them with their feed, as it is a sign of a depraved stomach, which wants correcting.

The *Salt-Marshes* are good pasture, remarkably so for horses who have been surfeited; and indeed for many other disorders: they purge more by dung and urine than any other pasture, and make afterwards a firmer flesh. Their water is for the most part brackish, and of course, as well as

The good properties of salt-marshes.

The Gentleman's Farriery.

the grafs, saturated with falts from the fea-water.

The great advantages that arife from drinking *Sea-Water*, fo much recommended (among us) of late; may have taken the hint, from the good effects it was obferved to produce, in obftinate chronical cafes on morbid horfes; who are as frequently fent to the marfhes, when all other means are defpaired on, as confumptive people are to *Bristol*, and as often recover beyond expectation.

Grafs often neceffary.

A fummer's grafs is often neceffary; more particularly to horfes gluttoned with food, and who ufe little exercife, but a month or two's running, is proper for moft; thofe efpecially who have been worked hard, and have ftiff limbs, fwelld legs, or wind-galls. Horfes, whofe feet have been impair'd by quitters, bad fhoeing, or any other accidents, are alfo beft repaired at grafs.

Cautions with refpect to pafture.

The *Fields* which lie near great towns, and are much dunged, are not proper

proper pasture for horses; but on observation appear very incurious to them, if they feed thereon all the summer.

Horses may be kept abroad all the year, where they have a proper stable or shed, to shelter them from the weather, and hay at all times to come to. So treated, they are seldom sick, their limbs always clean and dry; and with the allowance of corn will bear, and do more business than horses kept constantly at house.

If, when horses are taken up from grass, they should grow hot and colicative, mix bran and chopp hay with their corn; and give them sometimes a feed of scalded bran for a fortnight, or longer: let their exercise and diet be moderate for some time, and both increased by degrees.

Equal quantities of antimony and sulphur, are sometimes given in their corn or mashes, to sweeten the blood, and keep the body open. The use of antimony is frequently directed for this

this purpose, to the quantity of half an ounce at a time ; but is thought by some to succeed best, after the blood has been gradually warmed, and fused by the above, or with antimony and gum guaiacum, previously taken for ten or twelve days.

But should
be finely
powdered.

These antimonials should not be given grossly powdered, as is generally practised, but ground very fine ; otherwise little of them will pass into the blood, but will sometimes, when given in large doses, scour themselves off without entering at all.

What her-
bage the
fittest for
foiling.

When horses are *foiled* in the stable, care should be taken that the herbage is young, tender, and full of sap ; whether it be green barley, tares, clover, or any thing else the season produces, and that it be cut fresh once every day at least, if not oftner : for, when herbage is old and fibrous, it is divested of the sap, has a tendency to putrefaction, and frequently causes obstructions in the bowels ; which are sometimes of bad consequence, unless an evacuation is procured, when the
dung

The Gentleman's Farriery.

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dung has often appeared not unlike what has lain a considerable time, mellowing and rotting on a dunghill.

When horses lose their flesh much in soiling, they should in time be taken to a more solid diet; for it is not in soiling, as in grazing; where, though a horse loses his flesh at first, yet after purging he soon grows fat.

Cautions
in soiling.

No general directions can be laid down for the *feeding* of horses, but this; that all horses who constantly work, should be well fed; others should be fed in proportion to their *exercise*, and not kept to certain regular feeds, whether they work or not.

Horses
should be
fed in pro-
portion to
their work

Young horses, who have not done growing, must be indulged more in their feeding, than those come to their maturity; but if their exercise is so little, as to make it necessary to abridge their allowance of hay, a little fresh straw should constantly be put in their racks, to prevent their nibbling the manger, and turning crib-biters.

How to
prevent
their crib-
biting.

A due

A due degree of *exercise* is of the utmost consequence to maintain a horse in perfect health and vigour. But let it be observed, that a horse is never to be rode hard, or put on any violent exercise, when he has a belly-full of meat or water: move him gently at first, and he will naturally mend his pace.

It is obvious to every one, what care should be taken of a horse after violent exercise, that he cools not too fast, and drinks no cold water, &c. for which reason we shall wave particular directions.

Bran and
beans,
when pro-
per.

The usual method of feeding coach-horses on the road, by giving them bran with a few beans before their oats, is not amiss; because their work makes them perspire so much, that without something of this kind, they would be faint, or apt to grow colic. The *bran* keeps their body open, and the *beans* prevents its scouring, which horses of weak bowels are subject to on a journey.

Most

Most horses fed for sale, have the interstices of their muscles, so filled with fat, that their true shapes are hardly known. For which reason, a horse just come out of the *dealer's* hands, should at first be gently used. He ought to lose blood, and have his diet lowered, though not too much: walking exercise is most proper at first, two hours in the day; in a week or fortnight, two hours at a time, twice a day: after this usage for a month, bleed him again, and give him two or three times a week scalded bran, which will prepare him for purging physick, that may now be given safely, and repeated at the usual intervals.

Horses newly brought from the dealers, how to be managed.

When a horse comes out of a dealer's hands, his cloathing must be abated by degrees; and care taken to put him in a moderately warm stable: otherwise the sudden transition would be attended with the worst consequences.

C H A P. II.

Some General Directions in regard to Bleeding, Purging, &c.

Directions
concern-
ing bleed-
ing.

HORSES who stand much in stable, and are full fed, require bleeding now and then; especially when their eyes look heavy, dull, red, and inflamed; as also, when they feel hotter than usual, and mangle their hay.

Young horses should be bled when they are shedding their teeth, as it takes off those feverish heats, they are subject to at those times.

But the cases that chiefly require bleeding, are colds, fevers of most kinds, falls, bruises, hurts of the eyes, strains, and all inflammatory disorders, &c.

It is right to bleed a horse, when he begins to grow fleshy at grass, or at any other time when he looks heavy:

Bleeding, Purging, &c.

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heavy: and it is generally proper to bleed before purging.

Let your horse always be bled by measure, that you may know what quantity you take away: two or three quarts is always enough at one time; when you repeat it, allow for the disorder, and the horse's constitution.

To bleed
always by
measure.

Let the blood, when cold, be carefully examined, both as to colour and consistence, whether black, florid, fizy, &c.

Purging is often necessary in gross full horses, in some disorders of the stomach, liver, &c. but should be directed with caution.

Cautions
concern-
ing purg-
ing.

Let it be remembered, that a horse is purged with difficulty; that the physick generally lies twenty four hours in the guts before it works; and, that the tract of bowels it has to pass through, is above thirty yards, and lying horizontally; consequently resinous and other improper drugs may, and often do, by their violent

Directions in regard to

irritations, occasion excessive gripings and cold sweats, shave off the very mucus, or lining of the guts, and bring on inflammations, which often terminate in mortifications.

'Tis remarkable too, that the stomach and guts of a horse are but thin, compared to some other animals of the same bulk, and therefore must be more liable to inflammation and irritation.

When
proper.

Horses kept much in the stable, who have not the proper benefit of air and exercise, in proportion to their food, should in *spring* have a mild purge or two, after a previous preparation by bleeding, lowering their diet, and scalded mashes.

Cases that
require it
most.

Horses that fall off their stomach, whether it proceeds from too full feeding, or ingendering crudities and indigested matter, should have a mild purge or two.

Horses of a hot temperament, will not bear the common aloetic purges;
their

Bleeding, Purging, &c.

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their physick therefore should be mild and cooling.

Purging is always found very beneficial in stubborn dry coughs; but mild mercurials joined with them, make them yet more efficacious.

Horses that have those sorts of lamenesses, that are said to proceed from *humours* flying about (which are of the *rheumatic* kind, and in young horses proceed from fizy blood, and occasion lameness in every limb; require frequent purging; and should also have, between whisks, medicines that attenuate and thin the fluids.

Horses of a watry constitution, who are subject to swelled legs, that run a sharp briny ichor, cannot have the causes removed any way so effectually as by purging.

The first purge you give to a horse should be mild, in order to know his constitution.

It

Some mistakes concerning purges.

It is a mistaken notion, that if a proper-prepared purge does not work to expectation, the horse will be injured by it; for though it does not pass by stool, its operation may be more efficacious, as an alterative to purify the blood, and it may pass by urine, or other secretions.

Purging medicines are very successfully given in small quantities, mixed with others; and act then as alteratives.

If mercurial physick is given, care should be taken that it be well prepared; and warmer cloathing, and greater circumspection is then required.

The manner of giving purges, and working off.

Purges should be given early in the morning upon an empty stomach; about three or four hours after the horse has taken it, he should have a feed of scalded bran; and a lock or two of hay may then be put in his rack. The same day give him two more mashes; but, should he refuse warm meat, he may be allowed raw bran.

All

Bleeding, Purging, &c.

55

All his water for his milk warm
and have a ~~portion~~ of ~~heat~~ ~~in~~ ~~it~~, but, if he refuses to drink warm
water, give it him ~~without~~ ~~heat~~.

Early the next morning, give him
another ~~draught~~, but if he refuses to eat
it, give him as much warm water as
he will drink: let him be ~~moderately~~
cloathed, and ride gently ~~about~~. This
should be done two or three times a day,
unless he purges violently. And if
twice, will does he ~~improve~~ or not,
give him a foot of ~~oil~~ ~~or~~ ~~oil~~ ~~or~~ ~~oil~~.

During the working, a horse should
drink plentifully. But if he will not
drink warm water, he must be in-
dulged with cold, rather than not
drink at all.

We shall here insert some ~~general~~
forms of purges.

TAKE succorine ~~three~~ ~~ten~~ ~~drams~~ ~~of~~ ~~the~~ ~~same~~ ~~form~~ ~~of~~
jallap and salt of tartar each two ~~drams~~
drams, grated ginger one dram,
oil of cloves thirty ~~drops~~; make
them into a ball with syrup of
buckthorn.

Cr.

Directions in regard to

Or,

TAKE aloes and cream of tartar each one ounce, jallap two drams, cloves powdered one dram, fyrup of buckthorn a fufficient quantity.

Or,

The following, which has an established character among sportsmen.

TAKE aloes, from ten drams to an ounce and a half, myrrh and ginger powdered each half an ounce, saffron and oil of anniseed each half a dram.

Half an ounce of *Castile* soap, to a horse of a gross constitution, may be added to any of the above; and the proportions may be increased for strong horses.

When mercurial physick is intended, give two drams of calomel over night, mixed up with half an ounce of a diapente and a little honey, and the purging ball the next morning.

The following, when it can be afforded, is a very gentle and effectual purge,

Bleeding, Purging, &c.

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purge, particularly for the sick
horses; and if prepared with the In-
dian rhubarb, will not be expensive.

TAKE of the best ~~Indian~~ rhubarb ~~one~~ ^{two}
one ounce, ~~which~~ ^{powdered}
half an ounce of ~~it~~ ^{it} ~~is~~ ^{is} ~~to~~ ^{to}
grated one drachm; make into a
ball, with syrup of rose.

TAKE ~~for a~~ ^{for a} ~~two~~ ^{two} ~~drachms~~ ^{drachms} ~~of~~ ^{of} ~~the~~ ^{the}
a pint of boiling water ~~to~~ ^{to} ~~be~~ ^{be} ~~used~~ ^{used}
with three drachms of ~~the~~ ^{of} ~~the~~ ^{of}
tartar; pour off and add to it
four ounces of ~~the~~ ^{of} ~~the~~ ^{of}
two or three of ~~the~~ ^{of} ~~the~~ ^{of}

This last physic is ~~very~~ ^{very} ~~good~~ ^{good}
and quick in its operation, and ~~is~~ ^{is} ~~very~~ ^{very}
preferable in all ~~the~~ ^{the} ~~cases~~ ^{cases} ~~of~~ ^{of}
any other purge, as it ~~is~~ ^{is} ~~very~~ ^{very} ~~good~~ ^{good}
blood and operates ~~very~~ ^{very} ~~well~~ ^{well}.

When horses ~~are~~ ^{are} ~~the~~ ^{the} ~~very~~ ^{very} ~~weak~~ ^{weak}
after purging, it is necessary to give ~~them~~ ^{them} ~~a~~ ^a ~~little~~ ^{little}
warm stomach-dose, such as ~~the~~ ^{the} ~~infusion~~ ^{infusion}
infusion of chamomile flowers, and
feeds, and ~~fasten~~ ^{fasten} ~~on~~ ^{on} ~~the~~ ^{the} ~~stomach~~ ^{stomach}
may be given for that purpose.

Should the purging continue too
long, give an ounce of ~~the~~ ^{of} ~~the~~ ^{of}

Directions in regard to

a pint of Port wine, and repeat it once in twelve hours, if the purging continues. Plenty of gum arabic water should also be given, and in case of violent gripes, fat broth glysters should be often thrown up, with from fifty to an hundred drops of laudanum in each.

When a
horse
swells.

When a purge does not work, but makes the horse swell, and refuse his food and water; which is sometimes the effect of bad drugs, or catching cold: warm diureticks are the only remedy; of which the following are recommended.

A diuretic
drink.

T A K E a pint of white wine, mix with it a dram of camphor dissolved in a little rectified spirit of wine; then add two drams of oil of juniper, and the same quantity of unrectified oil of amber, and four ounces of honey, or syrup of marshmallows.

Or,

A diuretic
ball.

T A K E venice turpentine one ounce, incorporate with the yolk of an egg; then add juniper berries, and fresh anniseeds pounded, each

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each half an ounce, unrectified oil of amber two drams; make into a ball with syrup of marshmallows.

When a horse swells much with phyſick, do not ſuffer him to be rode about till he has ſome vent, but rather lead him gently in hand, till ſome evacuation is obtained.

As it is obſerved, that horſes more willingly take ſweet and palatable things, than thoſe that are bitter and of an ill taſte; care ſhould be taken that the latter are given in balls: and that their drinks are always contrived to be as little nauſeous as poſſible, and ſweetened either with honey or liquorice. Thoſe that are prepared with groſs powders, are by no means ſo agreeable to a horſe, as thoſe made by infuſion; as the former often ſtain the mouth, irritate the membranes about the palate and throat, and frequently occasion the cough they are intended to prevent.

Balls ſhould be of an oval ſhape, and not exceed the ſize of a pullet's egg; when the doſe is larger, it ſhould

Directions in regard to

be divided into two ; and they should be dipt in oil, to make them slip down the easier.

As we have given some general forms of purges, we shall observe the same rule in regard to glysters, with some few cautions and remarks.

Horses
should be
raked be-
fore their
glysters.

Let it be observed then, that before the administering emollient glysters in costive disorders, a small hand well oiled should be passed up the horse's fundament, in order to bring away any hardened dung, which otherwise would be an obstacle to the glyster's passage.

A pipe and
bag pre-
ferable to
a syringe.

A bag and pipe of a proper form, is to be preferred to a syringe, which throws up the glyster with so much force, that it often surprizes a horse, and makes him reject it, as fast as it goes in: whereas the liquor, when pressed gently from the bag, gives him no surprize or uneasiness, but passes easily up into the bowels, where it will sometimes remain a long time, and be extreamly useful, by cooling and relaxing them ; and will sometimes incor-

incorporate so with the dung, as not easily to be cast off from the other contents of the guts. These emollient sort of glysters are extremely serviceable in such cases, and greatly preferable to purging ones, which in general are too pungent, and stimulate too much, especially if aloe is a part of the composition.

Nutritive glysters are very necessary, ~~and~~ and often save a horse from starving, ~~when~~ when his jaws are so locked up by convulsions, that nothing can be conveyed by the mouth.

They should not exceed a quart or three pints at a time, nor be often repeated: nor should they be too fat; but made of sheep's heads, mutton, or any other meat broths: milk, porrage, rice-milk strained, and many other such nourishing things.

TAKE marshmallows and com-
 mile flowers each a large hand-
 ful, bay-berries and sweet fennel-
 seeds bruised, each an ounce;
 boil in a gallon of water to three
 quarts,

Directions in regard to, &c.

quarts, pour off into a pan, and dissolve in it half a pound of treacle, and a pint of linseed oil, or any common oil.

To make it more laxative, add four ounces of lenitive electuary, or the same quantity of cream of tartar, or common purging salts.

A purging
glyster.

T A K E two or three handfuls of marshmallows, fenna one ounce, bitter apple half an ounce, bayberries and anniseed bruised, each an ounce, salt of tartar half an ounce; boil a quarter of an hour in three quarts of water, pour off, and add four ounces of syrup of buckthorn, and half a pint of oil.

This glyster will purge a horse pretty briskly; and may be given successfully, when an immediate discharge is wanting; especially in some fevers with inflamed lungs, or other disorders, which require speedy relief.

Observa-
tion.

But the generality of emollient glysters, may be prepared with much less trouble;

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trouble: as two quarts of water gruel, with half a pound of treacle, a pint of oil, and a handful of common salt, will as effectually answer every purpose.

TAKE pomegranate bark, or oak bark two ounces, red rose leaves, fresh or dry, a handful, balauftines an ounce; boil in two quarts of water, till one is near consumed; pour off and dissolve in it four ounces of diascordium; to which may be added a pint of Port wine.

A restraining glyster.

This will answer in all common cases, where restringents are necessary, but should never be given in larger quantities; for the longer glysters of this kind lie in the bowels, the more efficacious they are.

CHAP. III. Of COLDS.

AS the source of the generality of fevers, coughs, and many other disorders, that both men and horses

Colds are the first source of most fevers.

horses are subject to, arise originally from taking cold; I have made that disorder the subject of my first chapter, as introductory to the subsequent ones, on *Fevers, Pleurisy, Coughs, &c.*

Perspiration,
what

The doctrine of perspiration (which I wish in general better understood, because it is so principally concerned in most acute disorders) is now so evidently demonstrable, that I am almost tempted to explain it, so far at least, as would give my readers a general idea thereof, and of the consequence of its suppression, or being checked: but, as it would be breaking through the limits I have prescribed myself, I must desire they would have recourse, for further satisfaction on that head, to *Chamber's Dictionary, Art. Perspiration.*

Taking
cold, what

By taking cold then, we mean that the pores and outlets of the skin (which in a natural healthy state of body, are continually breathing out a fine fluid, like the steam arising from hot water, or smoke from fire) are so far shut up, that these steams, or perspirable matter,
not

not having a free passage through them, are hindered from going off in the usual manner; the consequence of which is, their recoiling on the blood, overfilling the vessels, and affecting the head, glands or kernels of the neck and throat, the lungs, and other principal parts.

To enumerate the various causes of ^{The} colds, would be endless: the most ^{causes.} usual are, riding horses till they are hot, and suffering them to stand in that condition, where the air is cold and piercing; removing a horse from a hot stable to a cold one, and too suddenly changing his cloathing: hence it is, that horses often catch such severe colds, after they come out of dealers hands; and by not being carefully rubbed down, when they come in hot off journeys.

The signs of a horse's catching cold, ^{The symp;} are a cough, heaviness, and dullness, ^{toms.} which affect him, more or less, in proportion to the severity of it: the eyes are sometimes moist and watery, the kernels about the ears and under the jaws swell, the nose gleans, and he
E rattles

rattles in his breathing; and when the cold is violent, the horse will be feverish, his flanks work, and he will both loath his hot meat, and refuse his water. When these last symptoms are attended with a slimy mouth, ears and feet cold, and great inward soreness, there is danger of a bad fever.

Good symptoms. But when the horse coughs strong, snorts after it, is but little off his stomach, pricks up his ears, and moves briskly in his stall, dungs, and stales freely, his skin feels kindly, and his coat does not stare, he is in no danger, and there will be no occasion for medicines of any kind; but you should bleed him about two quarts, keep him warm, and give him feeds of scalded bran, with as much warm water as he will drink, in order to dilute his blood.

The cure. If the disorder should increase, the horse feel hot, and refuse his meat, bleed him, if a strong one, two quarts more; and if you are not satisfied, without giving medicines, avoid as you would a poison, a farrier's drench; (which is generally composed of some
hot,

hot, nauseous powders, given in a quantity of ale; which too often increases the fever, by overheating the blood, and palls the horse's stomach by its loathsomeness.) And instead of it, Infuse two ounces of anniseeds, with a dram of saffron, in a pint and a half of boiling water; pour off the clear, and dissolve in it four ounces of honey; to which may be added four spoonfuls of sallad oil: this drink may be given every night; or one of the following balls: but should the horse be inclined to costiveness, remember that his body should be kept open by emollient glysters, or cream of tartar dissolved in his water, to the quantity of three or four ounces a day.

TAKE of the fresh powders of The horse
 anniseed, elicampane, carraway, ball.
 liquorice, turmerick, and flower
 of brimstone, each three ounces;
 juice of liquorice four ounces,
 dissolved in half a pint of moun-
 tain, saffron powdered half an
 ounce, sallad oil and honey each
 half a pound, Genoa treacle
 E 2 twelve

Of COLDS.

twelve ounces, oil of anniseed one ounce: mix together with wheat-flower enough to make them into a paste.

Or, Take the following from Dr. BRACKEN.

The cordial ball.

TAKE anniseed, carraway feed, and greater cardamoms, finely powdered, of each an ounce, flower of brimstone two ounces, turmerick in fine powder, one ounce and a half, saffron two drams, Spanish juice dissolved in water, two ounces, oil of anniseed half an ounce, liquorice - powder one ounce and a half; wheat-flower, a sufficient quantity, to make into a stiff paste, by beating all the ingredients well in a mortar.

Observations on it.

These balls consist of warm opening ingredients; and, given in small quantities, about the size of a pullet's egg, will encourage a free perspiration; but in case of a fever, should be cautiously continued. They are much more efficacious, and in all cases superior

Of COLDS.

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rior to the farriers drenches, if dissolved in a pint of warm ale.

This simple method, with good nursing and hot mashes, warm water and cloathing, especially about the head and throat, which promotes the running at the nostrils, will answer in most sudden colds; and when the horse feeds heartily, and snorts after coughing, moderate exercise every day will hasten his recovery.

The scalded bran should be put hot into the manger, for the steams conduce not a little, to promote the running, which is often very plentiful, and greatly forwards the cure. His manger should be kept clean, by filling with straw; his hay well shook and sprinkled with water, and given in small quantities: for his breathing, at this time, taints the hay, and then he will not touch it.

To a horse loaded with flesh, a rowel may sometimes be necessary, as may also a gentle purge or two, to some, when the distemper is gone off.

CHAP.

C H A P. IV.

Of FEVERS in General.

The symptoms of a fever.

AS I purposely avoid giving descriptions of diseases, or so much as guessing at the causes within, which bring them about, I shall immediately enter upon the symptoms which denote a simple fever present. These are great restlessness, the horse ranging from one end of his rack to the other; his flanks beat; his eyes are red and inflamed; his tongue parched and dry; he loses his appetite, and nibbles his hay, but don't chew it, and is frequently smelling to the ground; the whole body is hotter than ordinary (though not parched, as in some inflammatory disorders;) he dungs often, little at a time, usually hard, and in small bits; he sometimes stales with difficulty, and his urine is high-coloured; he seems to thirst, but drinks little at a time, and often; his pulse beats full and hard, to fifty strokes and upwards in a minute.

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The first intention of cure is bleeding, to the quantity of two or three quarts, if the horse is strong, and in good condition; then give him a pint of the following drink four times a day; or an ounce of nitre, mixed up into a ball with honey, may be given thrice a day, instead of the drink, and washed down with three or four horns of any small liquor.

The fever balls and drink.

TAKE of baum, sage, and chamomile flowers each a handful, liquorice-root sliced half an ounce, salt prunel, or nitre, three ounces; infuse in two quarts of boiling water, when almost cold strain off, and squeeze into it the juice of two or three lemons, and sweeten with honey.

As the chief ingredient to be depended on in this drink is the nitre; it may perhaps be as well given in water alone; but as a horse's stomach is soon palled, and he requires palatable medicines, the other ingredients may in that respect have their use.

A remark.

His

The diet
in fever.

His diet should be scalded bran, given in small quantities; which, if he refuses, let him have dry bran sprinkled with water: put a handful of pick'd hay into the rack, which a horse will often eat, when he will touch nothing else: his water need not be much warmed, but should be given often, and in small quantities: his cloathing should be moderate, too much heat and weight on a horse being improper in a fever; which scarce ever goes off in critical sweats (as those in the human body terminate) but by strong perspiration.

If, in a day or two he begins to eat his bran, and pick a little hay, this method with good nursing will answer: but if he refuses to feed, more blood should be taken away, and the drinks continued; to which may be added two or three drams of saffron, avoiding at this time all hotter medicines; the following glyster should be given, which may be repeated every day, especially if his dung is knotty and dry.

TAKE

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TAKE two handfuls of marsh-mallows, and one of chamomile flowers; fennil seeds an ounce; boil in three quarts of water to two, strain off, and add four ounces of treacle, and a pint of linseed oil, or any common oil.

The emollient glyster.

Two quarts of water-gruel, fat broth, or pot-liquor, with the treacle and oil, will answer this purpose; to which may be added a handful of salt. These sort of glysters are properer than those with purging ingredients.

Remarks

The following opening drink is very effectual in these fevers, and may be given every other day, when the glysters should be omitted; but the nitre-balls or drink may be continued, except on those days these are taken.

TAKE of cream of tartar four ounces, Glauber salts two ounces; dissolve in barley-water, or any other liquor.

An opening fever drink.

Four ounces of Glauber salts, or cream of tartar, with the same quantity of lenitive electuary, may be given for the same purpose, if the former should not open the body sufficiently.

The signs
of recovery.

In four or five days the horse generally begins to pick his hay, and has a seeming relish to food; though his flanks will heave pretty much for a fortnight: yet the temper of his body, and return of appetite, shew that nothing more is requisite to compleat his recovery, than walking him abroad in the air, and allowing plenty of clean litter to rest him in the stable.

Practical
observations.

This method of treating a fever is simple, according to the laws of nature; and is confirmed by long experience, to be infinitely preferable to the hot method.

The intention here is to lessen the quantity of blood, promote the secretions of urine and perspiration, and cool and dilute the fluids in general.

How

How far vinous cordials, strong-beer drinks loaded with fiery powders, and such methods are likely to answer these purposes, is submitted to the judicious observer; as also, whether adopting the cool one in its stead is not as real an improvement in farriery as physic.

There is another sort of fever that horses are very subject to of a more ^{A compound} complicate and irregular nature than ^{fever.} the former; which, if not properly treated, often proves fatal.

The signs are a slow fever with ^{The} languishing, and great depressions; the ^{symptoms.} horse is sometimes inwardly hot, and outwardly cold; at other times hot all over, but not to any extreme; his eyes look moist and languid; he has a continual moisture in his mouth, which is the reason he seldom cares to drink, and then he does but little at a time. He feeds but little, and leaves off as soon as he has eat a mouthful or two; his body is commonly open; his dung soft and moist, but seldom greasy; his

staling is often irregular, sometimes little, at other times profuse, seldom high-coloured, but rather pale, with little or no sediment.

When a horse's appetite declines daily, till he refuses all meat, it is a bad sign. When the fever doth not diminish, or keep at a stand, but increases, the case is then dangerous. But when it sensibly abates, and his mouth grows drier, the grating of his teeth ceases, his appetite mends, and he takes to lay down (which perhaps he has not done for a fortnight) these are promising signs.

The farrier should sometimes be consulted.

The various and irregular symptoms that attend this slow fever, require great skill to direct the cure, and more knowledge of the symptoms of horses diseases, than the generality of gentlemen are acquainted with. The experienced farrier should therefore be consulted and attended to, in regard to the symptoms; but very seldom as to the application of the remedy, which is generally above their comprehension; though it may be readily selected,
by

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by duly attending to the observations here inculcated.

First then, a moderate quantity of ^{The cure.} blood, not exceeding three pints, may be taken away, and repeated in proportion to his strength, fullness, inward soreness, cough, or any tendency to inflammation. After this, the fever-drink may be given, with the addition of an ounce of snake-root, and three drams of saffron; the quantity of the nitre may be lessen'd, and these increased, as the symptoms indicate.

The diet should be regular; no oats ^{The diet.} given, but scalded, or raw bran sprinkled; the best flavoured hay should be given by handfuls, and often by hand, as the horse sometimes cannot lift up his head to the rack.

As drinking is so absolutely necessary ^{Dilution necessary.} to dilute the blood, if the horse refuses to drink freely of warm water or gruel, he must be indulged with having the chill only taken off, by standing in the stable; nor will any inconvenience ensue, but oftner an advantage: for, the

the nauseous warmth of water, forced on horses for a time, palls their stomachs and takes away their appetites, which the cold water generally restores.

When the
fever in-
creases.

Should the fever after this treatment increase, the horse feed little, stale often, his urine being thin and pale, and his dung sometimes loose, and at other times hard; should the moisture in his mouth continue, his skin being sometimes dry, and at others moist, with his coat looking staring, and surfeited. Upon these irregular symptoms, which denote great danger, give the following balls, or drink; for in these cases there is no time to be lost.

The com-
pound fe-
ver balls.

TAKE of contrayerva-root, myrrh, and snake-root powdered, each two drams, saffron one dram, mithridate or Venice treacle half an ounce, make into a ball with honey, which should be given twice or thrice a day, with two or three horns of an infusion of snake root, sweetened with honey; to
a pint

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a pint and half of which may be added, half a pint of treacle water, or vinegar.

Should these balls not prove successful, add to each a dram of camphor, and where it can be afforded, to a horse of value, the same quantity of castor. Or the following drink may be substituted in their stead for some days.

TAKE of scordium, contrayerva ^{The fever drink.} and snake-root, of each two ounces, liquorice-root sliced one ounce, saffron two drams; infuse in two quarts of boiling water close covered for two hours, strain off, and add half a pint of distilled vinegar, four ounces of spirit of wine, wherein half an ounce of camphor is dissolved, and two ounces of mithridate, or Venice treacle; give a pint of this drink every four, six, or eight hours.

Should the horse be costive, recourse must be had to glysters, or the opening drink: should he purge, take care not to suppress it, if moderate; but if, by
CON-

Of FEVERS.

continuance, the horse grows feeble, add diascordium to his drinks, instead of the mithridate ; if it increases, give more potent remedies.

Observation.

Let it be remembered, that camphor is a very powerful and effectual medicine, in these kinds of horse-fevers ; being both active and attenuating, and particularly calculated to promote the secretions of urine and perspiration.

A horse should drink plentifully to promote the operation of these medicines ; but instead of them, to a horse of small value, give an ounce of a diapente, and half an ounce of mithridate, with a strong infusion of rue, scordium and snake-root, in the manner as above directed.

Symptoms to be regarded.

Regard should also be had to his staling ; which, if in too great quantities, so as manifestly to depress his spirits, should be controuled by proper restringents, or by preparing his drinks with lime-water. If, on the contrary, it happens that he is too remiss this way, and stales so little as
to

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to occasion a fullness, and swelling of his body and legs, recourse may be had to the following drink:

TAKE of salt-prunella, or nitre, A drink to promote urine.
one ounce; juniper-berries, and
Venice turpentine, of each half
an ounce; make into a ball with
oil of amber.

Give him two or three of these balls, at proper intervals, with a decoction of marshmallows, sweetened with honey.

The signs of a horse's recovery are known by his hide's keeping open, and his skin feeling kindly; his ears and feet will be of a moderate warmth, and his eyes brisk and lively; his appetite mends, he lays down well, and both stales and dungs regularly. Signs of a horse's recovery.

Be careful not to overfeed him on his recovery; let his diet be light, feeds small, and increased by degrees as he gets strength: for by overfeeding, horses have frequent relapses, or get surfeits which are always difficult of cure.

G

This

Practical
observations.

This is the most successful method of treating these irregular, malignant fevers; where it is evident, by the various efforts nature makes to relieve herself, she wants assistance, and a spur to quicken her motions. For by the use of these warm medicines a crisis, or termination of the disease is quickened and promoted, as appears by the alteration made both in the urine and skin; the former of which, by its thickness, shews signs of concoction, as it is called, or of a separation of the feverish matter from the blood; and the latter by its smoothness and glossiness proves that a regular and free perspiration is obtained: these two secretions are of such importance to the welfare of every animal, that the necessity of rectifying them, when disordered, is obvious from the consequences.

The cure
of an in-
termittent
fever.

If this fever should be brought to intermit, or prove of the intermitting kind, immediately after the fit is over, give an ounce of Jesuits bark, and repeat it every six hours, till the horse has taken four or six ounces.

The

The true reasons perhaps why so many horses miscarry in fevers, are, that their masters, or doctors, will not wait with patience, and let nature have fair play: that they generally neglect bleeding sufficiently at first; and are constantly forcing down sugar sops, or other food in a horn, as if a horse must be starved in a few days, if he did not eat: then they ply him twice or thrice a day with hot medicines and spirituous drinks, which (excepting a very few cases) must be extremely pernicious to a horse, whose diet is naturally simple, and whose stomach and blood, unaccustomed to such heating medicines, must be greatly injured, and without doubt are often inflamed by such treatment.

From the experience we lately had of the epidemic cold and fever among our horses, and from the observations of others in the years 1732 and 1734, it evidently appeared that the simplest method of treatment succeeded best. Thus it is proper to bleed largely at first, to the quantity of three quarts,

Reasons
why so
many hor-
ses die in
fevers.

Of epi-
demic
fevers.

if the horse is full and strong: and if it appears that his lungs are not relieved by it, but continue stuffed and loaded, the bleeding should be repeated; and a rowel may be put in his chest or belly.

A general
method of
cure.

Dilute the blood with plenty of water, or white drink; let his diet be warm bran mashees, and his hay sprinkled. Should the fever rise, which will be known by the symptoms above described, give him an ounce of nitre thrice a day in his water, or made up in a ball with honey. Let his body be kept cool and open, with the opening drink, given twice or thrice a week; or an ounce of salt of tartar may be given every day, dissolved in his water, for that purpose, omitting then the nitre. After a week's treatment in this manner, the cordial ball may be given once or twice a day, with an infusion of liquorice-root sweetened with honey; to which may be added, when the phlegm is tough, or cough dry and husky, a quarter of a pint of linseed, or salad oil, and the same quantity of oxymel squills.

As

As the kernels about the throat are **Necessary** greatly swelled in these cases, I need **cautions.** not mention the necessity of keeping the head and throat warmer than ordinary, to promote a freer perspiration, and forward the running at the nose, which in a horse answers the end of spitting, or expectoration in us: but the nose should never be syringed, as is sometimes done, to promote this discharge; which it often checks, and occasions bad swellings in the neighbouring parts and glands: for let it be remembered these are critical runnings of nature's own appointment, which by art may soon be frustrated. The following cooling purge is very proper to give at the decline of the distemper, and may be repeated three or four times.

TAKE two ounces of fenna; anni- A cooling
seed and fennel bruised each half purge.
an ounce; salt of tartar three
drams: let them infuse two hours
in a pint of boiling water; strain
off, and dissolve in it three ounces
of

Of FEVERS.

of Glauber salt, and two of cream of tartar: give for a dose in the morning.

This purge generally works before night very gently; and in fevers, and all inflammatory disorders, is infinitely preferable to any other physick.

The pulse of horses should be attended to.

Before we close this chapter on fevers, it may be no improper hint to the curious, to take notice that a horse's pulse should more particularly be attended to than is customary, as a proper estimate may thereby be made both of the degree and violence of the fever present, by observing the rapidity of the blood's motion, and the force that the heart and arteries labour with to propel it round.

The nighest calculation that has been made of the quickness of the pulse in a healthy horse, is, that it beats about forty strokes in a minute; so that in proportion to the increase above this number, the fever is rising, and if farther increased to above fifty, the fever is very high.

How

How often the pulse beats in a minute may easily be discovered by measuring the time with a stop-watch, or minute sand-glass, while your hand is laid on the horse's near side, or your fingers on any artery; those which run up on each side the neck, are generally to be seen beating, as well as felt a little above the chest; and one within side each leg may be traced with the finger.

A due attention to the pulse is so important an article, in order to form a proper judgment in fevers, that it would appear amazing it has so much been neglected, if one did not recollect, that the generality of *farriers* are so egregiously ignorant, that they have no manner of conception of the blood's circulation, nor in general have they ability enough to distinguish the difference between an artery and a vein.— With such pretty guardians do we intrust the healths and lives of the most valuable of animals!

For

The use of
the pulse
exempli-
fied.

For which reason I cannot too much inforce the necessity of this study and practice, as it is evident to every one with what scrupulous attention the human pulse is examined in every feverish stage, and how often the physician's judgment is chiefly directed by it: What discoveries therefore might not be made by accurate observations on the pulse of horses, both in regard to the quickness of the blood's motion, and to the hardness of the artery, from its difficult vibrations! It would be a sure guide to distinguish an inflammatory fever with dense fizy blood, from an irregular depressed one; it would direct us more certainly when, and how often we should repeat bleeding in fevers, and other disorders, and when we should draw off blood previous to purging; or refrain from the latter, till by lowering the horse's diet, his constitution and blood is reduced to a proper temper; for in such as are replete and sanguine, without this caution an inflammation of the bowels is soon brought on by the irritations

tations, such stimulating medicines produce on vessels too turgid, and many a horse's life has been sacrificed to this neglect, but more particularly fine, high fed ones. It would also be of use to discover whether a horse has recovered himself in due time, after having been drove hard, either on the chace, or race, &c. &c. This digression, it is hoped, will be more readily pardoned, as it is not a meer matter of speculation, but a practical remark.

C H A P. V.

Of a PLEURISY, and Inflammation of the Lungs, &c.

TH E S E disorders have scarce been mentioned by any writer in farriery before Mr. *Gibson*; who, by frequently examining the carcases of dead horses, has found them subject to the different kinds of inflammations here described.

Inflammatory disorders are frequent in horses.

H

He

He has often discovered matter on the pleura (or membrane which lines the chest internally) making its way into the chest; he has found in some horses the whole substance of the lungs black, and full of a gangreend water; and in others abscesses of various sizes; and in short, inflammations in every bowel. In order to distinguish these disorders from others, we shall describe the symptoms in Mr. Gibson's own words.

The signs
of a pleu-
rify, and
inflamma-
tion of the
lungs.

“ A pleurisy then, which is an inflammation of the pleura, and a peripneumony, which is an inflammation of the lungs, have symptoms very much alike; with this difference only, that in a pleurisy a horse shews great uneasiness, and shifts about from place to place; the fever which at first is moderate, rises suddenly very high; in the beginning he often strives to lie down, but starts up again immediately, and frequently turns his head towards the affected side, which has caused many to mistake a pleuritic disorder for the gripes, this sign being common

Inflammation of the Lungs.

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common to both, though with this difference :

In the gripes a horse frequently lies down, and rolls, and when they are violent, he will also have convulsive twitches, his eyes being turned up, and his limbs stretched out, as if he was dying ; his ears and feet sometimes occasionally hot, and sometimes as cold as ice ; he falls into profuse sweats, and then into cold damps, strives often to stale and dung, but with great pain and difficulty ; which symptoms generally continue, till he has some relief : But in a pleurisy, a horse's ears and feet are always burning-hot, his mouth parched and dry, his pulse hard and quick ; even sometimes when he is nigh dying, his fever is continued and increasing ; and though in the beginning he makes many motions to lie down, yet afterwards he reins back as far as his collar will permit, and makes not the least offer to change his posture, but stands panting with short stops, and a disposition to cough, till he has relief, or drops down.

How to
distinguish them
from the
gripes.

The symptoms of inflamed lungs.

In an inflammation of the lungs, several of the symptoms are the same, only in the beginning he is less active, and never offers to lie down during the whole time of his sickness; his fever is strong, breathing difficult, and attended with a short cough; and whereas in a pleurisy, a horse's mouth is generally parched and dry, in an inflammation of the lungs, when a horse's mouth is open, a roapy slime will run out in abundance; he glects also at the nose a reddish or yellowish water, which sticks like glue to the inside of his nostrils.

In a pleurisy, a horse heaves and works violently at his flanks, with great restlessness, and for the most part his belly is tucked up; but in an inflammation of the lungs, he always shews fullness, and the working of his flanks is regular, except after drinking and shifting his posture; and his ears and feet are for the most part cold, and often in damp sweats.

The cure of a pleurisy, and inflamed lungs.

The cure of both these disorders is the same. In the beginning a strong horse may lose three quarts of blood, the

the next day two quarts more ; and if symptoms do not abate, the bleedings must be repeated, a quart at a time ; for it is speedy, large, and quick repeated bleedings that are in these cases chiefly to be depended on. But if a horse has had any previous weakness, or is old, you must bleed him in less quantities, and oftner. Mr. *Gibson* recommends rowels, one on each side the breast, and one on the belly ; and a blistering ointment to be rubbed all over his brisket upon the foremost ribs.

The diet and medicines should be both cooling, attenuating, relaxing, and diluting ; and the horse should have warm mashes, and plenty of water, or gruel. The following balls may be given thrice a day.

TAKE of sperma-ceti and nitre,
of each one ounce ; oil of anniseed thirty drops ; honey enough
to make a ball.

A pint of barley-water in which figs and liquorice-root have been boiled, should be given after each ball ; to
which

Of a PLEURISY, and

which the juice of lemons may be added ; and if the lungs are greatly oppressed with a dry short cough, two or three horns full of the decoction may be given three or four times a day, with four spoonfuls of honey and linseed oil. A strong decoction of the rattle-snake-root is also much recommended in pleuritic disorders, and may be given to the quantity of two quarts a day, sweetened with honey, It remarkably attenuates the blood, and disperses the inflammation, and in some parts is deemed a specific for this complaint.

Glysters
necessary.

An emollient glyster should be injected once a day, to which may be added two ounces of nitre, or cream of tartar.

In two or three days he will probably run at the nose, and begin to feed ; but should he not, and continue hot and short-breathed, you must bleed him again, and give the following glyster.

TAKE

TAKE fenna and marshmallows, A purging of each two ounces; fennel and glyster. bay-berries, each one ounce: boil in five pints of water to two quarts, pour off the clear, and add four ounces of purging salts, two or three of syrup of buckthorn, and half a pint of linseed, or any common oil.

If by these means he grows cooler, and his pain moderates, repeat the glyster the next day, unless it worked too much; then intermit a day; and when he comes to eat scalded bran and picked hay, leave off the balls, and continue only the decoction, with now and then a glyster.

But let it be observed, that a horse Observa- seldom gets the better of these disorders, unless he has relief in a few days; for if the inflammation is not checked in that time, it usually terminates in a gangrene, or collection of matter, which for want of expectoration, soon suffocates him. tions.

But

The
horse's
diet and
exercise
should be
well at-
tended to.

But as pleuritic disorders are apt to leave a taint on the lungs, great care should be taken of the horse's exercise and feeding, which should be light and open for two or three weeks. Thus a quartern of bran scalded, with a spoonful of honey and flower of brimstone, may be given every day ; with two or three small feeds of oats, sprinkled with chamber-lye. Instead of the bran, for a change, give about a quart of barley scalded in a double infusion of hot water, that it may be softened, and the water given to drink. His exercise should be gradual, in an open air and fair weather ; and when his strength is recovered, a gentle purge or two should be given ; that of rhubarb, when it can be afforded, is best, or the purging drink already recommended for this purpose.

An external pleurisy.

There is also an external pleurisy, or inflammation of the muscles between the ribs.

The signs.

The signs are a stiffness of the body, shoulders, and fore-legs ; sometimes with a short dry cough, and a shrinking

ing when handled in those parts. When not well cured, it lays the foundation of what is called a chest-founder.

Bleeding, soft pectorals, and gentle purges, are the internal remedies; and externally the parts affected may be bathed with equal parts of spirit of sal armoniac, and ointment of marsh-mallows, or oil of chamomile. The cure.

These outward inflammations frequently fall into the inside of the fore-leg, and sometimes near the shoulder; forming abscesses, which terminate the disorder.

The membrane which separates the lungs, and more particularly the diaphragm, or midriff, is often also inflamed; which is scarce to be distinguished from the pleurisy, only in this, that when the midriff is greatly inflamed, the horse will sometimes be jaw-set, and his mouth so much closed that nothing can be got in: but the method of cure is the same.

C H A P. VI.

Of a COUGH, and
ASTHMA.

The
causes of
a settled
cough.

THE consequence often of the pre-
ceding disorders injudiciously
treated, are settled habitual coughs;
which frequently degenerate into
asthmas, and broken-wind.

Various are the causes assigned for
this last disorder, which, as meerly
conjectural, we shall wave; but the ap-
pearances on the dissection of broken-
winded horses, will be taken notice of
in the proper place.

Coughs to
be distin-
guished.

Nothing has more perplexed practi-
tioners than the cure of settled coughs;
the cause of which, perhaps, has been
their want of attention to the different
symptoms which distinguish one
cough from another; for without
strict observance thereof, it is impos-
sible to find out the true method of
cure.

Thus

Thus if a horse's cough is of long standing, attended with loss of appetite, wasting of flesh, and weakness, it denotes a consumption; and that the lungs are full of knotty, hard substances, called tubercles, which have often been discovered on dissection. *Vide* Consumption.

The following signs denote when the cough proceeds from phlegm, and slimy matter, that stuff up the vessels of the lungs.

The horse's flanks have a sudden quick motion; he breathes thick, but not with his nostrils open, like a horse in a fever, or that is broken-winded; his cough is sometimes dry and husky, sometimes moist, before which he wheezes, rattles in the throat, and sometimes throws out of his nose and mouth great gobs of white phlegm, especially after drinking, or when he begins or ends his exercise, which discharge commonly gives great relief. Some such horses wheeze and rattle to such a degree, and are so thick-winded,

The signs
of a moist
cough.

I 2

that

Of a COUGH, and

that they can scarce move on, till they have been out some time in the air; though then they will perform beyond expectation,

These are properly asthmatic cases, and ought to be distinguished in their symptoms from that purfiveness and thick-windedness we see in some horses, occasioned by too full or foul feeding, want of due exercise, or their being taken up from winter's-grass. But these two last cases are easily cured by proper diet and exercise; in the one by lowering his keeping, and in the other by increasing it.

The above asthmatic case proves often very obstinate; but, if it happens to a young horse, and the cough is not of long standing, it is greatly relieved, if not totally cured, by the following method.

The cure, If the horse is full of flesh, bleed him plentifully; if low in flesh, more sparingly; which may occasionally be repeated, on very great oppressions, and difficulty of breathing, in proportionate quantities.

As

As mercurial medicines are found remarkably useful in these cases, give a mercurial ball (with two drams of calomel) over night, and a common purge the next morning: or the following, which is much recommended by Mr. *Gibson*. Mercurials recommended,

TAKE gum-galbanum, ammoniacum, and assa foetida, of each two drams; fine aloes one ounce; saffron one dram; oil of anniseeds two drams; oil of amber one dram; with honey enough to form into a ball. An alterative purge.

They may be repeated at proper intervals, with the usual cautions. In the intermediate days, and for some time after, one of the following balls may be given every morning.

TAKE cinnabar of antimony, finely levigated, six ounces; gum ammoniacum, galbanum, and assa foetida, of each two ounces; garlick four ounces; saffron half an ounce; make into a paste for Balls for an obstinate cough

And is a case very doubtful at least, if not incurable; but when the horse is young, the following method may be successful.

The cure. Take away first a moderate quantity of blood; then give him two drams of calomel, mixed up with an ounce of diapente, for two nights; and the next morning a purging ball. Keep him well cloathed and littered, and feed him with scalded bran and warm water.

Once in eight or ten days this purge may be repeated, with one mercurial ball only, given over-night.

The following balls may then be taken, one every day, about the size of a pullet's egg, the horse fasting two hours afterwards; and should be continued two months or longer, to be of real service.

Balls for
an obsti-
nate dry
cough.

TAKE native cinnabar, or cinnabar of antimony, half a pound; gum guaiacum four ounces; myrrh, and gum ammoniac, of each two ounces; Venice soap half a pound;

bound: the cinnabar must be finely levigated, as before observed, and the whole mixed up with honey, or oxymel squills.

These mercurial and ponderous medicines are well adapted to open ob-
Observations.
 structions in the lungs, and prevent those little knots, or tubercles, which so frequently ulcerate, and lay the foundation of an incurable malady, or consumption; but the common pectorals alone will avail nothing in old stubborn coughs; their efficacy being lost in the long tour they have to make, before they come to the lungs; and indeed, were it otherwise, without they had such powerful openers joined with them, they would be of little consequence; for where there is any expectations from medicines, such are chiefly to be relied on.

Before we close this chapter, it may be necessary to observe here that some young horses are subject to coughs on cutting their teeth, their eyes also are sometimes affected from the same cause. In these cases always bleed,

K. and

Of a BROKEN-WIND.

and if the cough is obstinate, repeat it, and give warm mashes; which in general are alone sufficient to remove this complaint. But when the cough is an attendant on worms, as it often is in young horses, you must give such medicines as have a power to destroy those animals; particularly mercurial physick at proper intervals, and immediately half an ounce of Æthiops mineral mixed up with the cordial or pectoral balls, may be given every day. *Vide* Ch. WORMS.

C H A P. VII.

Of a BROKEN-WIND.

The cause
of broken-
wind.

THIS disorder hitherto seems to have been little understood, but Mr. *Gibson* is inclined to think, that the source of it is frequently owing to injudicious, or hasty, feeding young horses for sale; by which means the growth of the lungs, and all the contents within the chest is so increased, and in a few years so preternaturally enlarged,

Of a BROKEN-WIND.

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enlarged, that the cavity of the chest is not capacious enough for them to expand themselves in, and perform their functions.

A narrow contracted chest with large lungs may sometimes naturally be the cause of this disorder: and it has been observed that horses rising eight years old, are as liable to this distemper, as at a certain period of life men fall into asthmas, consumptions, and other chronic diseases.

The reason why this disorder becomes more apparent at this age may be, that a horse comes to his full strength and maturity at this time: at six he commonly finishes his growth in height; after that time he lets down his belly and spreads, and all his parts are grown to their full extent; so that the pressure on the lungs and midriff is now more increased.

Why horses rising seven or eight, grow broken-winded.

But how little weight soever these reasons may have, repeated dissections have given ocular proofs of a preternatural largeness, not only of the

K 2

lungs,

lungs of broken winded horses, but of their heart, and its bag ; and of the membrane which divides the chest ; as well as of a remarkable thinness in the diaphragm, or midriff.

The parts
affected in
broken-
winded
horses,

This disproportion has been observed to be so great, that the heart and lungs have been almost of twice their natural size, perfectly sound, and without any ulceration whatever ; or any defect in the wind-pipe, or its glands.

Hence it appears that this enormous size of the lungs, and the space they occupy, by hindering the free action of the midriff, is the chief cause of this disorder ; and as the substance of the lungs was found more fleshy than usual, they of course must lose a great deal of their spring or tone.

The diffi-
culty in
breathing
accounted
for.

This fleshiness and size of the lungs may in a great measure be the cause, why the inspirations in broken-winded horses are disproportionately slow ; for we may observe that they draw in their breath slowly, their flanks filling up, and

and rising with difficulty: but that their flanks fall suddenly, and their breath bursts forth with violence, both from the mouth and nostrils; inso-much that a man in the dark, by holding his hands on a horse's mouth and nose, may easily discover if he is broken-winded.

Whoever considers a broken-wind in this light, must own that it may be reckoned among the incurable distempers of horses; and that all the boasted pretensions to cure are vain and frivolous, since the utmost skill can amount to no more than now and then palliating the symptoms, and mitigating their violence.

Broken-wind incurable.

We shall therefore only lay down such methods as may probably prevent this disorder, when pursued in time. But if they should not succeed, we shall offer some remedies and rules to mitigate its force, and to make a horse as useful as possible under this malady.

'Tis usual before a broken-wind appears, for an horse to have a dry obstinate

The symptom which foretel a broken-wind.

Of a BROKEN-WIND.

obstinate cough, without any visible sickness, or loss of appetite ; but on the contrary a disposition to foul feeding, eating the litter, and drinking much water.

In order then to prevent, as much as possible, this disorder, bleed him, and give him the mercurial physick above prescribed, which should be repeated two or three times.

The following balls are then to be taken for some time, which have been found extreamly efficacious in removing obstinate coughs.

Balls for
a broken-
wind.

T A K E aurum mosaicum, finely powdered, eight ounces ; myrrh and elicampane, powdered, each four ounces ; anniseeds and bayberries, each an ounce ; saffron half an ounce ; make into balls with oxymel squills.

The aurum mosaicum is made of equal parts of quicksilver, tin, sal armoniac, and sulphur.

Broken-

Broken-winded horses should eat sparingly of hay, which as well as their corn may be wetted with chamber-lye, or fair water; as this will make them less craving after water.

The volatile salts in the urine may make it preferable to water, and may be the reason why garlick is found so efficacious in these cases; two or three cloves given at a time in a feed, or three ounces of garlick bruised, and boiled in a quart of milk and water, and given every other morning for a fortnight, having been found very serviceable.

Careful feeding and moderate exercise has greatly relieved broken-winded horses; and, though for the first summer they have not been able to endure much labour, yet many have been found less oppressed the second, and some scarce perceptibly affected the third; and even able to bear great fatigue. And could a horse be kept constantly in the field, and taken up only when used, he might by this management

The diet for broken-winded horses.

Garlick recommended.

Broken-winded horses should be constantly abroad.

nagement do good service for many years.

Necessary
cautions.

But whoever expects to cure his horse, by sending him out to grafs, will find himself disappointed; especially if he remains abroad after the spring grafs: for on his return to the stable and dry meat, he will be more oppressed and short breathed than before, for want of the open air and moist food he had been accustomed to.

Horses sent to grafs in order to be cured of an obstinate cough, have often returned compleatly broken-winded, where the pasture has been rich and succulent, so that they have had their bellies constantly full. As the ill consequence therefore is obvious, where you have not the conveniency of turning out your horse for a constancy, you may soil him for a month or two with young green barley, tares, or any other young herbage.

To pursue thick-winded horses, Barbadoes and common tar have often
been

Of a BROKEN-WIND.

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been given with success to the quantity of two spoonfuls mixed with the yolk of an egg, dissolved in warm ale, and given fasting two or three times a week, especially those days you hunt or travel.

But in order to make all these sorts of horses of any real service to you, the grand point is to have a particular regard to their diet, observing a just oeconomy both in that and their exercise; giving but a moderate quantity of hay, corn, or water, at a time, and moistening the former, to prevent their requiring too much of the latter, and never exercising them but with moderation, as has before been observed. The following alterative ball may be given once a fortnight or three weeks, and as it operates very gently, and requires no confinement but those days it is given (when warm meat and water are necessary) it may be continued for two or three months.

TAKE succotrine aloes six drams, An alterative purging ball.
myrrh galbanum and ammoniacum, of each two drams; bay-berries
L

Of a CONSUMPTION.

berries half an ounce: make into a ball, with a spoonful of oil of amber, and a sufficient quantity of syrup of buckthorn.

C H A P. VIII.

Of a CONSUMPTION.

The signs
of a con-
sumption.

WHEN a consumption proceeds from a defect in a horse's lungs, or any principal bowels; the eyes look dull; the ears and feet are mostly hot; he coughs sharply by fits; sneezes much, and frequently groans with it; his flanks have a quick motion; he gleans often at the nose, and sometimes throws out a yellowish curdled matter, and he has little appetite to hay, but will eat corn, after which he generally grows hot.

The cure.

As to the cure, one of the principal things is bleeding in small quantities (a pint, or pint and half from some horses is sufficient) which should be repeated as often as the breath is more than

than ordinarily oppressed. Pectorals may be given to palliate present emergent symptoms; but as dissections have discovered both the glands of the lungs, and mesentery to be swelled, and often indurated, the whole stresses lies on mercurial purges, and the following ponderous alteratives, given intermediately.

TAKE native cinnabar, or cin-
nabar of antimony, one pound ;
powder very fine, and add the
same quantity of gum guaicum
and nitre; give the horse an
ounce of this powder, twice a
day, wetting his feeds. Alterative
powders.

The spring grass is often extremely
serviceable, but the salt marshes are
to be preferred, and even to be more
depended on than medicines; for
great alterations are thereby made in
the blood and juices, and no small
benefit arises from open air, and pro-
per exercise. The salt-
marsh re-
commend-
ed.

But it may be worth observing that
when a horse frequently relapses, after
L 2 Observa-
tion. appear-

appearances of amendment, when a yellowish gleet, or curdled matter runs from his nose, and he grows emaciated, is much addicted to sweat, heaves much with a reduplicated motion, and has a short rattling cough; under these circumstances there can be little hopes of his recovery, or any future services from him, consequently to save further expences, the best way would be to dispatch him as an incurable.

A remark. As many of the above medicines in this, and the preceeding chapter for coughs, may be thought too expensive for horses of no great value, tar-water may supply their place; and perhaps will be found on trial no unworthy medicine, as Barbadoes and common tar has been experienced very effectual in some sort of coughs, and of great service to thick-winded horses.

C H A P. IX.

Of an Apoplexy, or Staggers,
Convulsive Disorders, Le-
thargy, Epilepsy, and Palsy.

FArriers generally include all disorders of the head under two denominations, viz. *Staggers* and *Convulsions*; wherein they always suppose the head primarily affected. But in treating these disorders, we shall distinguish between those that are peculiar to the head, as having their source originally thence; and those that are only concomitants of some other disease, where the head is affected secondarily by consent of nerves, the source of this disorder being in the stomach, bowels, &c. By this method we shall avoid many blunders, which would otherwise arise in practice, for want of knowing the true seat of the disorder.

Disorders
of the head
how to be
distinguished.

In

In an apoplexy a horse drops down suddenly, without other sense or motion than a working at his flanks.

The
symptoms
of apo-
plexy, or
stagers.

The previous symptoms are drowfiness, watry eyes, somewhat full and inflamed; a disposition to reel, feebleness, a bad appetite; the head almost constantly hanging, or resting on the manger; sometimes with little or no fever, and scarce any alteration in the dung or urine: the horse is sometimes disposed to rear up, and apt to fall back when handled about the head, which is often the case with young horses, to which it does not prove suddenly mortal, but with proper help they may sometimes recover. If the apoplexy proceeds from wounds, or blows on the head, or matter on the brain, besides the above symptoms, the horse will be frantick by fits, especially after his feeds, so as to start and fly at every thing. These cases seldom admit of a perfect recovery; and when horses fall down suddenly, and work violently at their flanks, without any ability to rise after a plentiful

plentiful bleeding, they seldom recover.

All that can be done is to empty the vessels as speedily as possible, by striking the veins in several parts at once, bleeding to four or five quarts, and to raise up the horse's head and shoulders, supporting them with plenty of straw. If he survives the fit, cut several rowels; give him night and morning glysters prepared with a strong decoction of fenna and salt, or the purging glyster mentioned in the directions; blow once a day up his nostrils a dram of powder of asarabacca, which will promote a great discharge, afterwards two or three aloetic purges should be given; and to secure him from a relapse, by attenuating and thinning his blood, give him an ounce of equal parts of antimony and crocus metallorum for a month; or which is preferable, the same quantity of cinabar of antimony and gum guaiacum.

If the fit proceeds only from fullness of blood, high feeding, and want
When the staggers are not of dangerous

of sufficient exercise, or a sily blood (which is often the case with young horses, who though they reel, stagger, and sometimes suddenly fall down, yet are easily cured by the above method) an opening diet with scalded bran and barley will be necessary for some time; and the bleeding may be repeated in small quantities.

As to the other disorders of the head, such as lethargy or sleeping evil, epilepsy or falling sickness, vertigo, frenzy and madness, convulsions, and paralytical disorders, as they are most of them to be treated as the apoplexy, by bleeding and evacuations with the alteratives above directed, we shall wave treating on them separately, but mention some particular rules to distinguish them, according to the plan we laid down, and then offer some general remedies to the several purposes.

Thus in order to distinguish epileptic disorders and convulsions (which are often occasioned by worms, bots, and ulcerations of the stomach, bowels and midriff) from those which arise from

from original causes in the head only, we shall describe the symptoms which distinguish them from each other; by which means we shall be able to avoid any mistakes in the application of the remedy: and as epileptic disorders have by ignorant farriers been mistaken for the gripes, we shall also distinguish these disorders by the symptoms.

In an epilepsy, or falling sickness, the horse reels and staggers, his eyes are fixed in his head, he has no sense of what he is doing, he stales and dungs insensibly, he runs round and falls suddenly; sometimes he is immoveable, with his legs stretched out, as if he was dead, except only a quick motion of his heart and lungs, which causes a violent working of his flanks; sometimes he has involuntary motions, and shaking of his limbs, so strong, that he has not only beat and spurned his litter, but the pavement with it; and with these alternate symptoms a horse has continued more than three hours, and then has as surprizingly recovered; at the going off of the fit,

How epileptic disorders are distinguished from gripes.

M

he

he generally foams at the mouth, the foam being white and dry, like what comes from a healthful horse when he champs on the bit.

The
symptoms
of gripes
described.

But in all kinds of gripes, whether they proceed from disorders in the guts, or retention of urine, a horse is often up and down, rowls and tumbles about, and when he goes to lie down generally makes several motions, with great seeming carefulness, which shews he has a sense of his pain, and if he lays stretched out for any time, it is generally but for a short space. *Vide Chap. GRIPES.*

Epilepsies
and convulsions
arise from
different
causes.

Epilepsies and convulsions may arise from blows on the head, too violent exercise, and hard straining; and from a fullness of blood, or impoverished blood, and surfeits; which are some of the causes that denote the original disorder.

But the head may also be affected by sympathy of nerves; for excessive pain in any part of the body will excite convulsions, especially if the
nerves

nerves and tendinous parts are affected, as by wounds, punctures, and bruises externally, and by ulcers, gatherings of matter, and by bots and worms wounding and vellicating the nervous parts internally; long costiveness has sometimes also occasioned these disorders.

Young horses from four to six years, Young horses subject to convulsions from bots. are very subject to this disease, from bots in the spring; and the large coach-breed more than the saddle: they are seized without any previous notice, and if bots or worms are discovered in their dung, the cause seems to be out of doubt, more especially if they are lately come out of a dealer's hands.

When this convulsion proceeds from a distemperature of the midriff, or any of the principal bowels, it is to be distinguished from bots and vermin by previous symptoms: the horse falls off his stomach; grows gradually weak, feeble, and dispirited in his work; and turns short-breathed with the least exercise.

Convul-
sions from
the sto-
mach, and
other
principal
bowels
described.

The lively description of that universal cramp or convulsion, which seizes all the muscles of the body at once, and locks up the jaws, so that it is impossible almost to force them open, we shall give in Mr. *Gibson's* own words; who says, As soon as the horse is seized, his head is raised with his nose towards the rack, his ears pricked up, and his tail cocked, looking with eagerness, as an hungry horse when hay is put down to him, or like a high-spirited horse when he is put upon his mettle; insomuch that those who are strangers to such things, when they see a horse stand in this manner, will scarce believe any thing of consequence ails him; but they are soon convinced, when they see other symptoms come on a-pace, and that his neck grows stiff, cramped, and almost immoveable; and if a horse in this condition lives a few days, several knots will arise on the tendinous parts thereof, and all the muscles both before and behind, will be so much pulled and cramped, and so stretched,
that

that he looks as if he was nailed to the pavement, with his legs stiff, wide and stradling. his skin is drawn so tight on all parts of the body, that it is almost impossible to move it; and if trial be made to make him walk, he is ready to fall at every step, unless he be carefully supported; his eyes are so fixed with the inaction of the muscles, as gives him a deadness in his looks; he snorts and sneezes often; pants continually with shortness of breath: and this symptom increases continually till he drops down dead; which generally happens in a few days, unless some sudden and very effectual turn can be given to the distemper.

In all these cases the horse should first be bled plentifully, unless he is low in flesh, old, or lately come off any hard continued duty, then you must be more sparing of his blood; afterwards give the following ball:

The cure
of convul-
sions.

TAKE assa foetida half an ounce; Ruffia castor powdered two drams; valerian root powdered,
one

The ner-
vous ball.

Of an Apoplexy, or

one ounce: make into a ball with honey and oil of amber.

This ball may be given twice a day at first; and then once, washed down with a decoction of milletoe, or valerian, sweetened with liquorice or honey.

The laxative purges and emollient glysters should be given intermediately to keep the body open: but when the former balls have been taken a week or ten days, the following may be given once a day with the valerian decoction.

Another
nervous
ball.

TAKE cinnabar of antimony six drams, assa foetida half an ounce, aristolochia, myrrh and bay-berries, of each two drams: make into a ball with treacle and oil of amber.

This is the most effectual method of treating these disorders; but when they are suspected to arise from bots, and worms, which is generally the case, mercurial medicines must lead the way. Thus,

TAKE

TAKE mercurius dulcis, and philonium, of each half an ounce: A mercurial ball.
make into a ball with conserve of roses, and give the horse immediately; half the quantity may be repeated in four or five days.

The following infusion should then be given, to the quantity of three or four horns, three or four times a day, till the symptoms abate, when the above balls may be continued till they are removed.

TAKE penny-royal and rue, of An infusion.
each two large handfuls; chamomile flowers one handful; assa foetida and castor, of each half an ounce; saffron and liquorice-root sliced, of each two drams: infuse in two quarts of boiling water; pour off from the ingredients as wanted.

If the castor is omitted, add an ounce of assa foetida.

The following ointment may be rubbed into the cheeks, temples, neck, shoulders,

shoulders, spines of the back and loins, and wherever there is the greatest contractions and stiffness.

An emol-
lient lini-
ment.

TAKE nerve, and marshmallow ointment, of each four ounces; oil of amber two ounces; with a sufficient quantity of camphorate spirit of wine: make a liniment.

To horses of small value, give the following:

TAKE rue, penny-royal, and tobacco, of each a handful; assa foetida an ounce; boil in a quart of forge-water: let the decoction stand in the ingredients, and give as the former.

Frictions
very use-
ful in all
convulsive
cases.

Mr. *Gibson* mentions some extraordinary instances of success in cases of this sort by these methods, and repeated frictions, which are extremely serviceable in all convulsive disorders, and often prevent their being jaw-set; they should be applied with unwearied diligence, every two or three hours, wherever any stiffness or contractions

on

on the muscles appear, for a horse in this condition never lays down till they are in some measure removed.

He takes particular notice of a ^{A remarkable case.} horse, whose jaws were so locked up for three weeks, that both food and medicine were forced to be given by glyster; That not having recovered the use of his jaws for a fortnight, though he now moved them with less stiffness, he was determined, from the known relaxing power of opium, to give him half an ounce of it, dissolved in one of his glysters, the good effects of which were so evident, by a general amendment, that he was encouraged to continue it in the following manner :

TAKE Matthew's pill, and assa
foetida, of each an ounce : make
into a ball.

This ball he gave for one dose, and repeated once ; and by this, and the use of the nervous medicines given twice a week, and gentle purging, the horse was perfectly recovered.

N

The

Rowels
sometimes
of bad
confe-
quences.

The use of rowels in these cases is generally unsuccessful, the skin being so tense and tight, that they seldom digest kindly, and sometimes mortify; so that if they are applied, they should be put under the jaws, and in the breast.

How pa-
ralitic
disorders
should be
treated.

In paralytic disorders, where the use of a limb or limbs is taken away, the internals above recommended, should be given in order to warm, invigorate, and attenuate the blood; and the following stimulating embrocation should be rubbed into the parts affected.

A warm
stimulat-
ing lini-
ment.

TAKE oil of turpentine four ounces, nerve ointment and oil of bays, of each two ounces; camphor rubbed fine, one ounce; rectified oil of amber three ounces, tincture of cantharides one ounce.

With this liniment the parts affected should be well bathed for a considerable time, to make it penetrate; and when the hind parts chiefly are lame, the back and loins should be well rubbed with the same.

In

In lethargic disorders, strong purgatives are not required, but opening glysters, with the cinnabrine and gummy medicines: nor must you bleed in too large quantities, unless the horse be young and lusty. In old horses, rowels and evacuations are improper, but volatiles of all kinds are of use when they can be afforded.

How the
lethargy,
or sleepy
evil,
should be
treated.

When the horse is recovering, the following alterative purge may be repeated two or three times, as it operates very gently.

TAKE succotrine aloes one ounce ; An alterative purge
myrrh half an ounce ; assa fœ-
tida and gum ammoniacum, of
each two drams ; saffron one
dram : make into a ball with any
syrup.

Where a retention of dung is the cause of this disorder, the great gut should first be raked thoroughly with a small hand, after which plenty of emollient oily glysters should be thrown up, and the opening drink

How to
treat disorders
of the
head from
consti-
nens.

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given till the bowels are thoroughly emptied of the imprisoned dung. Their diet should for some days be opening, and consist chiefly of scalded bran with flower of brimstone, scalded barley, &c.

This general method we hope will give sufficient light into the nature of these disorders, and their treatment, without minutely entering into their causes; which in some cases, perhaps are inscrutable; and where the most plausible writers have appeared rather as learned triflers, than satisfactory reasoners.

C H A P. X.

Of the STRANGLES,
and VIVES.

The strangles described. **T**HE strangles is a distemper to which colts, and young horses are very subject; and begins with a swelling between the jaw-bones, which some-

sometimes extends to the muscles of the tongue; and is attended with so great heat, pain, and inflammation, that sometimes till matter is formed, the horse swallows with the utmost difficulty.

The symptoms are extraordinary The symptoms. heat and feverishness, with a painful cough; some horses losing their appetite intirely, others eating but little, by reason of the pain which chewing and swallowing occasions: when the swelling begins on the inside of the jaw bones, it is much longer in coming to matter than when more to the middle; when it arises among the glands, and divides into several tumours, the cure is generally tedious, as it breaks in different places; and when it forms upwards on the wind-pipe and gullet, there is sometimes danger of suffocation, unless the swelling soon breaks. But the most dangerous kind is, when, besides the above symptoms, the horse runs at the nose; this by some is called the bastard strangles.

As

Observation.

The running at the nose, which often attends the strangles, is dangerous; especially if it continues after they have ripened and broke, as the horse will be greatly weakened thereby. To prevent this waste and decay, give him every day for some time an ounce of Jesuits bark; or a strong decoction of guaiacum shavings, which have been found extreamly beneficial in restraining these glandular discharges when too liberal, and in drying up ulcers of all kinds in horses.

If a hardness remains after the sores are healed up, they may be anointed with the mercurial ointment; and, when the horse has recovered his strength, purging will be necessary.

The vives described.

The vives or ives differs from the strangles only in this, that the swellings of the kernels under the ears of the horse (which are the parts at first chiefly affected) seldom gather, or come to matter, but by degrees perspire off, and disperse, by warm cloathing, anointing with the marsh-mallow

mallow ointment, and a moderate bleeding or two. But should the inflammation continue, notwithstanding these means, a suppuration must be promoted by the methods above recommended in the strangles.

· When these swellings appear in an old or full-aged horse, they are signs of great malignity, and often of an inward decay, as well as forerunners of the glanders.

The mercurial ointment above mentioned, may be prepared thus:

A mercurial ointment.

TAKE of crude mercury, or quicksilver, one ounce; Venice turpentine half an ounce; rub together in a mortar till the globules of the quicksilver are no longer visible; then add two ounces of hogs-lard.

Some authors recommend this ointment to be used at first, in order to disperse the swellings, and prevent their coming to matter; bleeding and purging at the same time for that

O

pur-

purpose; but as in young horses they seem to be critical, the practice by suppuration is certainly more eligible and safe.

C H A P. XI.

Of the Diseases of the EYES.

The diseases of the eye distinguished.

IN order to make the disorders of the eyes, well understood, we shall consider them as arising from different causes: external injuries affecting the globe of the eye; and from internal causes affecting the humours within the globe. We shall consider also the eye as naturally weak from a bad conformation, which possibly may often be hereditary.

We shall thus be able to form a proper judgment when washes, and external applications, are really useful, and to be depended on; and when it is not only absurd to apply them, but even extremely pernicious.

In

In all recent disorders of the eye from external injuries, such as blows, bites, &c. attended with a swelling of the lid, and a running from the eye, you must first sponge the part often with cold spring water and vinegar; and if much swelled bleed immediately, and apply over it a poultice made of the pulps of roasted or boiled apples, cleared from their seeds and husks; or of conserve of roses and vinegar, with a little bole, and the white of an egg. When the swelling is abated, either of the following washes will compleat the cure.

TAKE white vitriol half an ounce, sugar of lead two drams, dissolve in a pint of spring water: to which may occasionally be added, when the rheum is very great, and inflammation removed, half an ounce of tutty, or compound powder of cerufs.

Let the eye and eye-lid be bathed three or four times a day with a clean sponge dipped in this wash; or it may

Of the Diseases of

be applied with a feather, leaving a few drops on the eye.

Mr. *Gibson*, from his own experience, recommends the following, with which alone he has succeeded in most common cases.

Another
repelling
eye-water.

TAKE two drams of rose buds, infuse them in half a pint of boiling water; when cold, pour off the infusion, and add to it twenty grains of sugar of lead.

This is to be used as the former; but I think the quantity of sugar of lead too small, and may occasionally be increased.

Extraor-
dinary
symptoms.

Sometimes from the violence of the inflammation, succeeding blows, and external injuries, the coats of the eye shall lose their transparency, thicken, and turn white, or pearl-colour; in the latter case the horse has some glimmering of light; in the former he is blind, while the eye continues in this state.

This

This appearance may arise from a stagnation of the lymph, or juices circulating in the cornea, which in their natural state are clear and thin, but undergo this change by the heat and inflammation: a white blister often forms on the cornea, the size sometimes of a grape; this always proves a relief, and when it breaks, hastens the cure. How caused.

In all these disorders, the degree of inflammation and obstruction is chiefly to be attended to, which must regulate the preceeding remedies in regard to their strength, so as to proportion them to the exigency of symptoms.

If the horse be fleshy and of a gross constitution, bleeding may be repeated; and a rowel will be necessary: let his diet be scalded bran or barley, avoiding for some days oats, beans, or any thing hard to chew. The cure of inflammation.

The cooling opening drink should be given every other day, which will answer better than aloetic purges.

If

If the eye-lids continue swelled and moist, and the under side of the eye inflamed, an ounce of honey may be added to four ounces of the above waters; or the part may be well bathed with an ounce of honey of roses, and half a dram of sugar of lead, dissolved in three ounces of spring water: to which may be added, when the eye is very watry, a spoonful or two of red wine, which will help to thicken the matter, and dry it up.

A film,
how re-
moved.

If a film, or thick slough should remain, it may be taken off, by blowing into the eye equal parts of white vitriol and sugar candy, finely powdered.

Glass finely powdered, mixed up with honey and a little fresh butter is much recommended by Dr. *Bracken* for this purpose; as also the following ointment.

An oint-
ment for
films on
the eye.

TAKE ointment of tutty one ounce, honey of roses two drams, white vitriol burnt one scruple:
this

this with a feather may be smear'd
over the eye twice a day.

The aq. sapphirina and the juice of
celandine are recommended also for
this purpose, a few drops of either
being put on the eye every day. For
the same purpose, as also for bruises
and other disorders of the eye, the
following has an established character.

TAKE eye-bright and celandine An oint-
ment for
bruises,
of each one handful, rosemary
tops half an handful, rosin half
an ounce; chop the herbs, and
boil them over a gentle fire in
three pints of cream, till it comes
to a green oil, then strain through
a fine cloth, and keep in a gally-
pot for use.

The quantity of a small bean may
be put in the horses eye, night and
morning.

The next is the famous ointment
of Sir *Hans Sloane*, where I have
only taken the liberty to double the
quantity of aloes.

TAKE

Sir Hans
Sloane's
ointment.

TAKE of prepared tutty one ounce,
of lapis hæmatites prepared two
scruples, of the best aloes twenty-
four grains, of prepared pearl
four grains; put into a marble
mortar, and mix with a sufficient
quantity of vipers fat.

Some ob-
servations
on it.

This medicine, like other nostrums, was in great esteem while it remained a secret; but since the discovery of it, and an examination of the composition, it appears to vary in nothing from the common practice, except in the substitution of the vipers fat, for lard, or fresh butter. It ought also to be remarked in Sir *Hans's* account, that in the application he calls to his assistance all the means medical practice has hitherto employed in cases of this kind; as bleeding, cupping, blistering, issues, alteratives, &c.—— So that either some of these methods must do very little, proportionably to the trouble they give, or his medicine less, to render both necessary. This form may however be preferable to washes, or eye-waters,
as

as it will remain longer on the parts affected.

Let it be remembered, that it has ^{Proper} long been observed in practice, that ^{cautions} the eye in its first state of inflammation is so very tender, that eye-waters prepared with tutty, and other powders aggravate the disorder; consequently during this state, the tinctures of vegetables, and solutions of salts are greatly preferable.

Wounds of the eye may be dressed ^{Wounds} with honey of roses alone, or with a ^{of the} little sugar of lead mixed with it, ^{eye how} adding thereto, after a few days, an ^{treated.} eighth part of tincture of myrrh; all the preceeding directions in regard to inflammation being attended to, especially bleeding, rowels, and gentle cooling physick.

When the humours of the eye are ^{Observa-} thickened, and the disorder is within ^{tion.} the globe, sharp external applications are not only useless, but extreamly detrimental; by the irritation they ^P occasion,

occasion, and consequently should be avoided.

In all cases of this sort, whether moon eyes, which are only cataracts forming, or in confirmed ones attended with a weeping; general evacuations, with internal alteratives, can only take place. Let us describe these internal disorders with their symptoms.

The
symptoms
of moon
eyes, and
cataracts.

These generally make their appearance, when a horse is turned five, coming six; at which time one eye becomes clouded, the eye-lids being swelled; and very often shut up; and a thin water generally runs from the diseased eye down the cheek, so sharp, as sometimes to excoriate the skin; the veins of the temple, under the eye, and along the nose, are turgid and full: though sometimes it happens that the eye runs but little.

This disorder comes and goes till the cataract is ripe; then all pain and running disappears, which is generally in two years. During this time some horses have more frequent returns than

than others; which continue in some a week or more, in others three or four; returning once in two or three months, and they are seldom so long as five without a relapse.

There is another kind of moon blindness, which is the forerunner of cataracts, where no humour or weeping attends. The eye is never shut up or closed here, but will now and then look thick and troubled, at which time the horse sees nothing distinctly: when the eyes appear sunk and perishing, the cataracts are longer coming to maturity; and it is not unusual in this case for one eye to escape.

A dry cataract described,

These cases generally end in blindness of one, if not of both eyes; the most promising signs of recovery are when the attacks come more seldom, and their continuance grows shorter, and that they leave the cornea clear and transparent, and the globe plump and full.

The general event.

The attempts to cure cataracts have hitherto been only palliative and mitigating

The cure of cataracts.

tigating the symptoms ; yet early care has sometimes been successful. To this end, the horse should be rowel'd and bled at proper intervals ; except where the eyes appear sunk and perishing, where it is often pernicious. During the violence of the symptoms, observe the cooling treatment above recommended, giving him an ounce of nitre every day mixed into a ball with honey, and bathe the parts about the eye with verjuice, or vinegar, wherein rose-leaves are infused.

Mercuri-
als recom-
mended.

In order to prevent a relapse, and open the vessels of the cristalline humour (which in this case is always found opaque, and when the cataract is confirmed, intirely loses its transparency) and hinder as much as possible the forming of obstructions, mercurials are chiefly to be depended on : thus give every other day for three or four mornings two drams of calomel, mixed up with conserve of roses ; and then purge off with the common ball.

During

During this course particular care should be taken of the horse: after repeating this, the alterative powders with cinnabar and guaiacum, should be given, for some weeks or months, if you expect any benefit from them; or they may be beat up into a ball with live millepedes, and an ounce and half given every day: if these should not succeed, and the horse is a valuable one, the turbith course recommended in the chapter on alteratives, seems to be the most promising method left. But to horses that are not so, a strong decoction of guaiacum shavings may be given for some time, to which crude antimony may be added in the following manner:

TAKE guaiacum shavings one pound, crude antimony tied in a rag, the same quantity; boil in two gallons of forge-water to one, and give a quart a day, either alone, or mixed with his water.

An alterative drink.

Dr. Bracken advises as much as will lie on a six-pence, of the following powder,

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powder, to be blown up the horse's nostrils once a day.

A stimulating
snuff.

TAKE turpeth mineral two drams,
assarabacca powdered, half an
ounce; mix, and keep in a bottle
well corked,

Tying up the temporal arteries is
by some much commended, especially
in full eyes; for by this means the
circulation of the blood to them is
greatly impeded: but to flat depressed
eyes this operation must be injurious,
as it would deprive them of their ne-
cessary nourishment, and tying up the
veins would seem here the most proper.

The
Haws
what.

The haws is a swelling and spungi-
ness that grows in the inner corner of
the eye, so large sometimes as to cover
a part of the eye. The operation here
is easily performed by cutting part of
it away; but the farriers are apt to
cut away too much: the wound may
be dressed with honey of roses; and if
a fungus or spongy flesh arises, it
should be sprinkled with burnt allum,
or touched with blue vitriol.

CHAP.

CHAP. XII.

Of the GLANDERS.

THE cause and seat of the glanders has till lately been so imperfectly handled, and so little understood, by the writers on this distemper, that it is no wonder it should be ranked among the *incurables*: but a new light having been thrown on this whole affair by the study of M. *La Fosse*, the King of *France's* farrier, who has been at the pains to trace out, and discover, by dissections, the source and cause of this disorder; we hope the method he has proposed, with some further experiments and improvements, will soon bring to a certainty of cure (in most cases at least) a distemper so dangerous to our horses, and that hitherto has eluded the force of art.

The glanders hitherto but little understood.

Before we make mention of this work, which has the approbation of the Royal Academy of Sciences, it will

will not be unacceptable to our readers, we apprehend, to have a more particular account of the symptoms of this disorder than M. *La Fosse* has laid down, that we may the better judge of the merit of our author and his discoveries.

The symptoms. The matter then discharged from the nostrils of a glander'd horse, is either white, yellow, or greenish, sometimes streaked or tinged with blood; when the disease is of long standing, the matter turns blackish, and becomes very fetid, and is always attended with a swelling of the kernels or glands under the jaws; in every other respect the horse is generally healthy and sound, till the distemper has been of some continuance.

From these symptoms and some observations made both by *Bracken* and *Gibson*, it is plain they were not absolute strangers to the seat of this disorder, though they neglected pushing their inquiries to the fountain-head, and consequently were at a loss to know how to apply the remedy to the parts affected.

But

But our author, after examining by dissection the carcases of glander'd horses, and making a strict scrutiny into the state of the *viscera*, asserted for that purpose by ingenious and expert anatomists for ten years together, affirms this disease to be altogether local; and that the true seat of it is in the *pituitary* membrane, which lines the partition along the inside of the nose, the *maxillary sinusses* or cavities of the cheek-bones on each side the nose, and the frontal *sinusses* or cavities above the orbits of the eyes; that the *viscera*, as liver, lungs, &c. of glander'd horses are in general exceeding sound; and consequently that the seat of this disorder is not in those parts, as has been asserted by most authors; nor indeed is it probable it should; for how could such horses preserve their appetite, their good appearance, sleek and shining coats; in a word. all the signs of health for many years together (which many glander'd horses are known to enjoy) with such distempered bowels.

Q.

But

Or else
demon-
stration
or is

But on nicely examining the heads of such horses, he found the cavities above mentioned, more or less, filled with a viscous slimy matter, the membrane which lines both them and the nostrils inflamed, thickened, and corroded with fordid ulcers, which in some cases had eat into the bones. These ~~sinuses~~ or cavities will be better understood by referring to the annexed plate.

Some co-
rives ob-
servations.

He observes that, when glander'd horses discharged matter from both nostrils, both sides of the membrane and cavities were affected; but when they ran at one nostril only, that side only was found distempered.

It is a curious remark of our author, that the sublingual glands, or the kernels situated under the jaw-bone, which are always swelled in this distemper, do not discharge their lymph into the mouth, as in man, but into the nostrils; and that he constantly found their obstruction agreed with the discharge; if one gland only was affected, then

then the horse discharged from one nostril only; but if both were, then the discharge was from both.

He sometimes, though rarely, found the bony partition of the nose carious or rotten; but that the spongy bones about this part must suffer from the acrimony of matter long pent up, is not at all to be doubted, though the more solid ones may escape.

The bones sometimes rotten.

The seat of the disorder thus discovered, our author with great ingenuity, has paved the way for the cure, by trepanning these cavities, and taking out a piece of bone, by which means the parts affected may be washed with a proper injection, and in fine the ulcers deterged, healed, and dried up.

The cure by trepanning.

This operation he has performed on three horses; two of whom discharged from one nostril only, and the third from both: the two first he trepanned on that side of the head which was affected, and to the other he performed it on both; and found that the wound

The success in regard to the operation.

and perforation filled up with good flesh in twenty-six days, and that the horses suffered no inconvenience from the operation; though after this experiment they were knocked on the head.

Why not
brought to
perfection
in *France*.

The directions and orders of the civil government of *France*, which hinder people from keeping glander'd horses long, prevented M. *La Fosse*'s repeating his attempts, and pushing his experiments further; but it is to be hoped that so useful a project will be pursued to its utmost extent, as it seems so promising in the execution, and is so important in its consequences: to which end we shall beg leave to animadvert on what has been said, and offer our opinion both in relation to the disease, the operation, and the manner of conducting the cure.

The true
cause and
seat of the
glanders.

The original source and cause then of this disorder seems to be an inflammation of the glands and membrane that lines the nostrils and these cavities; which, if not dispersed in time, will form matter, and ulcerate and
erode

erode the bones, for want of a free discharge to unload the cavities, and of proper applications to cleanse and deterge the ulcers: violent colds, or a feverish translocation, settling here, may also occasion the same complaint, and are probably the general causes.

There is a disorder in men, called *Ozæna*, that has great similitude to this in horses, and arises often from an inflammation in the *maxillary sinusses*, or cavities in the cheek-bones, from whence ensues a collection of matter; which when the cavity is full, or the head properly inclined, runs over into the nose, and would constantly discharge thence like a glander'd horse, was the head continued in the same position. The surgical cure is the taking out one or more teeth from the upper jaw, and perforating the cavity with a proper instrument, in order to make a depending orifice for the matter to flow through; and to make way for syringing the parts affected with proper injections, which in this case are thrown through the cavity into the nose.

An analogy between the glanders, and matter gathered in the cheek-bone of man.

The

The method of cure in both much alike.

The similarity of these two cases, with the method of cure, and the success attending the surgical treatment (which was first invented and perfected by our countrymen, *Drake* and *Cowper*) undoubtedly gave the first hint for trepanning, and syringing these cavities in horses; and it is most probable, that when the operation is attempted in time, before the bones become rotten, it will be attended with equal success; but should it be discovered by probing, after opening the cavities, that the bones are in that state, the best way then would be to dispatch the horse, to prevent unnecessary trouble and expence.

The parts fixed on for applying the trepan, are pointed out in the plate, and the manner of sawing out the bone will easily be understood by a view of the instrument, and the explanation annexed.

Directions to be observed after the operation.

The perforations being made, our next business is to prevent their filling up too fast; as it may be necessary to keep

keep them open for some weeks before a cure can be effected; for which purpose, after the use of the injection; let them be filled up with a piece of cork waxed over, and adapted exactly to their size, with a flat piece of lead over them, kept on with a proper bandage.

If this method should not prevent the granulations, or shoots of flesh, from filling up so fast as to choak up the perforation, and by that means hinder the injections passing freely; they must be suppressed by rubbing with caustick medicines, or touching with the actual cautery; as may also the bony edges; which, by obliging them to exfoliate or scale off, will retard the healing.

Causticks and cautery may be necessary.

The injections first made use of, should be of a deterfive nature; as a decoction of birthwort, gentian and centaury; to a quart of which, if two ounces of *Ægyptiacum* and tincture of myrrh are added, it may be as proper as any; and when the discharge is observed to abate, and the colour alter to a thick white matter, the injection may

Injections recommended.

may be changed for barley-water, honey of roses, and tincture of myrrh; and finally to dry up the humidities, and recover the tone of the relaxed glands, *Bater's* allum-water; or a solution of colcothar, vitriol, lapis medicamentosus, or such like, in lime-water, will most probably compleat the cure.

*Internals
necessary
to compleat
the cure.*

But whoever is at all acquainted with practical surgery, well knows, that without the assistance of internals, especially in glandular disorders, the cure is not easily effected; nor rendered compleat or lasting: I therefore advise a strong decoction of guaiacum chips to be given every day, to a quart or three pints, throughout the cure; and when the matter lessens, to purge at proper intervals, and put a rowel into the horse's chest, in order to divert the fluids from their old channel: if these should not succeed, mercurials may be given with the physick, and the alterative powders with lime-water may be taken for a time, if the horse is worth the expense.

C H A P. XIII.

*Of the CHOLIC or GRIPES,
and Pains in the Bowels,
from sudden Accidents.*

THERE seems to be no distemper so little understood by the common farrier, as the cholic or gripes in horses; one general remedy or method serving them in all cases; but as this disorder may be produced by very different causes, the method of cure must also vary, otherwise the intended remedy, injudiciously applied, will not only aggravate the complaint, but make it fatal. We shall divide this disorder into three different species: The flatulent or windy, the bilious or inflammatory, and the dry gripes; each of which we shall distinguish by their different symptoms, and then point out the proper remedies.

The gripes in horses, little understood by farriers

The different kind of gripes.

The flatulent, or windy cholic is thus known. The horse is often lying down, and as suddenly rising again

The symptoms of wind cholic.

R

with

Of the CHOLIC or

with a spring; he strikes his belly with his hinder feet, stamps with his forefeet, and refuses his meat; when the gripes are violent, he will have convulsive twitches, his eyes be turned up, and his limbs stretched out as if dying, his ears and feet being alternately very hot and cold: he falls into profuse sweats, and then into cold damps; strives often to rise, and turns his head frequently to his tanks; he then falls down, rolls about, and often turns on his back; this last symptom proceeds from a stoppage of urine, that almost always attends this sort of cholic, which may be increased by a load of dung pressing on the neck of the bladder.

Cribbing
horses
very like
just as this
cholic.

These are the general symptoms of cholic and gripes from wind, drinking cold water when hot, and when the perspirable matter is retained, or thrown on the bowels by catching cold; in all which cases they are violently distended. Cribbing horses are more particularly subject to this complaint, by reason they are constantly sucking in great quantities of air.

The

The first intention is to empty the The cure.
 strait gut with a small hand dipt in
 oil, which frequently makes way for
 the confined wind to discharge itself;
 and by easing the neck of the bladder,
 the suppression of urine is taken off,
 and the horse stales and gets ease.

Farriers generally strike a fleam into
 the bars of a horse's mouth, which
 seems to be of little or no use; for
 where a quantity of blood is intended
 to be taken away, the vessels of this
 part are neither large or numerous
 enough to furnish it; so that it is
 more eligible to take it from the neck
 vein, and is always proper in full, san-
 guine, plethoric, young horses.

The following ball and glyster sel-
 dom fail of giving relief in these cases.

TAKE Strasburgh or Venice tur- A ball for
 pentine, and juniper - berries the stran-
 pounded, of each half an ounce; gury in
 salt-prunella, or salt-petre, an the wind
 ounce; oil of juniper one dram; cholic.
 salt of tartar two drams: make
 R 2 into

Of the CHOLIC or

into a ball with any syrup; it may be given whole, and washed down with a decoction of juniper berries, or a horn or two of ale.

If the horse does not break wind, or stale plentifully, he will find no relief; therefore in an hour or two give him another ball, and add to it half a dram of salt of amber; which may be repeated a third time, if found necessary. During the fit the horse may be walked and trotted gently, but should by no means be harrassed beyond his ability, or dragged about till he is jaded.

The following glyster may be given, between the balls, or alone, and repeated occasionally.

A glyster
for wind.

TAKE chamomile flowers two handfuls; anise, coriander, and fennil seeds, of each an ounce; long pepper half an ounce: boil in three quarts of water to two; and add Daffy's elixir, or gin, half a pint; oil of amber half an ounce, and oil of chamomile eight ounces.

The

The subsequent balls and drink are also very proper for this purpose, and to remove gripes occasioned by drinking cold water when hot, or catching cold after violent exercise.

TAKE powder of anise, cumin, A ball for
and fennil seeds, of each half an wind.
ounce; camphor two drams;
pellitory of Spain one dram; oil
of juniper fifty drops: make into
a ball with any syrup, and wash
it down with a horn or two of ale.

Or,

TAKE mithridate, or Venice trea- A drink
cle, two ounces; Matthew's pill for the
two drams; camphor one dram, same.
dissolved in a little spirit of wine;
powder of fresh anniseed one
ounce; or the same quantity of
the cordial ball: dissolve in a
pint and half of ale.

Or,

TAKE philonium one ounce, Another
or an ounce and half; tincture drink.
of senna, or Daffy's elixir, and
fallad

Of the CHOLIC or

fallad oil, of each half a pint :
give warm for a drink, and repeat
it if necessary.

Either of these medicines are well
calculated for this purpose ; but as the
ingredients may not always be ready
at hand, or procurable, we shall put
down a couple of drinks, that have
frequently on trial been found success-
ful, and are easily prepared. It is to
be observed, that the horse should be
well rubbed, cloathed, and littered
with clean straw up to his belly.

Drinks for
the same
easily pre-
pared.

TAKE of Castile soap, or hard
soap, nitre, or salt-petre, of each
one ounce ; juniper-berries and
ginger, each half an ounce ; Ve-
nice turpentine or rosin, dissolved
with the yolk of an egg, six
drams : mix with a pint and half
of warm ale, or a decoction of
juniper-berries, with a large onion
boiled with them. This may be
repeated twice or thrice.

Or, TAKE a pint of brandy, rum,
or geneva, with as much sweet
oil,

oil, and give for a drink. Should this not succeed, boil an ounce of pepper or ginger, in a quart of milk; and add to it a handful of salt, and half a pint of oil: this given warm, will (according to *Burdon*) purge in two or three hours.

The signs of a horse's recovery, are, ^{Signs of} his lying quiet, without starting, or ^{a horse's} tumbling, and his gathering up his legs, ^{recovery.} and ceasing to lash out; and if he continues an hour in this quiet posture, you may conclude all danger over.

The next species of cholic we shall describe is the bilious or inflammatory; ^{The bi-} which, besides most of the preceeding ^{lious or} symptoms, is attended with a fever, ^{inflamma-} great heat, panting, and dryness of ^{tory cholic} the mouth; the horse also generally ^{or griper,} throws out a little loose dung, with ^{described.} a hot scalding water, which, when it appears blackish, or of a reddish colour, and fetid smell, denotes an approaching mortification.

In

The cure. In this case the horse should immediately be bled to the quantity of three quarts; and it should be repeated, if the symptoms do not abate in a few hours. The emollient glyster, with two ounces of nitre dissolved in it, should be thrown up twice a day, to cool the inflamed bowels; plenty of gum-arabic water should be taken; and a pint of the following drink given every two or three hours, till several loose stools are procured; and then it should be given only night and morning, till the disorder is removed.

**A cooling
purg-
ing
drink.**

TAKE fenna three ounces, salt of tartar half an ounce; infuse in a quart of boiling water an hour or two; then strain off, and add two ounces of lenitive electuary, and four of Glauber salts.

If this disorder is not removed by these means, but the inflammation and fever increase, attended with a
dif-

discharge of the flesh-coloured water, above described, the event will most probably be fatal: and the chief thing to be depended on now must be a strong decoction of Jesuits bark, given to the quantity of a pint every three hours, with a gill of red port wine.

A quart of the same may be used for a glyster, with two ounces of Venice turpentine, dissolved with the yolks of two eggs, an ounce of discordium, and a pint of red wine, and given twice a day: if the horse recovers give two or three mild rhubarb purges.

To a horse of little value, give the following; which in these cases has been found successful.

TAKE diapente one ounce, discordium half an ounce, myrrh in powder two drams; make it into a ball with two drams of oil of amber, to be given twice or thrice a day.

An alterative ball.

**The dry
gripes.**

The last we shall describe is the dry gripes, or the cholic which arises often from costiveness: it is discovered by the horse's frequent and fruitless motion to dung, the blackness and hardness of the dung, the frequent and quick motion of his tail, the high colour of his urine, and his great restlessness and uneasiness.

The cure.

In this case the strait gut should be examined and emptied with a small hand oiled properly for that purpose; the emollient oily glyster should be thrown up twice a day; and the above purging drink given, till the bowels are unloaded, and the symptoms removed.

The diet for a horse in the gripes, should be scalded bran, warm water-gruel, or white water, made by dissolving an ounce of gum arabic in a quart of water, and mixing it with his other water.

**Some proper
cautions and
remarks.**

From this history, and division of gripes and cholics, with their different treat-

treatment, it appears how absolutely necessary it is they should be well understood, in order to be managed skilfully : it is plain too, that violent hot medicines should in every species of this disorder be guarded against, and given with great caution and discretion, even in the first kind of flatulent cholic, where indeed they can only be wanted ; yet too often, when prepared by the farriers, with oil of turpentine, geneva pepper, and brine, &c. they even increase that disorder, by stimulating the neck of the bladder too forceably, heating the blood, and inflaming the bowels, till a mortification is brought on them. These are in general the constant appearance of horses that die of this disorder, whose bowels being examined for that purpose, have been found inflamed, full of red and livid spots, sometimes quite black, crisped with extream heat, and rotten.

C H A P. XIV.

*Of the Lax, and Scouring,
with other Disorders of the
Stomach, and Bowels.*

A purging
not always
to be stoppt

IT is sometimes a nice matter to form a proper judgment when to controul or encourage a looseness, but these general rules may be a direction: If a healthy full horse, on taking cold, or upon hard riding, overfeeding, eating unwholesome food, or with a slight fever, should have a moderate purging, by no means think of stopping it; but rather encourage it with an open diet, and plenty of warm gruel: but if it continues long, with gripings, the mucus of the bowels coming away, and the horse losing his appetite and flesh, it is then high time to give him proper medicines: if he voids great quantities of slime and greasy matter, give him the following drench, and repeat.

Of the Lax and Scouring, &c. 133

repeat it every other day for three times.

TAKE lenitive electuary and cream of tartar, of each four ounces; yellow rosin finely powdered, one ounce; and four ounces of sweet oil: mix with a pint of water gruel. An opening drink.

The following alterative ball alone has been found successful for this purpose, when given twice a week, with scalded bran and warm gruel.

TAKE succotrine aloes half an ounce, diapente one ounce; make into a ball with the juice of Spanish liquorice dissolved in water, and a spoonful of oil of amber. An alterative ball.

To this may be added two drams of myrrh, and a dram of saffron, and (where it can be afforded) half an ounce of rhubarb.

When the purging is attended with a fever, rhubarb should first be given,
to

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to the quantity of half an ounce, with an ounce and half of lenitive electuary : at night, after the working, give half an ounce or more of diascordium in a pint of red wine mull'd with cinnamon, and repeat it every day, and the rhubarb ball once in two or three.

But if the distemper increases, the horse's flanks and belly look full and distended, and he appears griped and in pain, let this glyster be given, and the quantity of diascordium increased to an ounce, in his night-drink.

A restraining glyster.

TAKE chamomile flowers one handful, red roses half a handful, pomegranate and balauſtines, of each an ounce ; boil in two quarts of water to one, strain off and dissolve in it two or three ounces of diascordium, and one of mithridate ; to which may be added a pint of port wine : repeat it once a day.

If

If the flux continues violent, give A restraint drink an ounce of roch allum, with an ounce and a half of bole, twice a day; or dissolve double this quantity with two ounces of diascordium, and the cordial ball in two quarts of hartshorn drink; to which may be added a pint of port: and give the horse three or four times a day a pint of this drink.

Some horses, having naturally weak stomachs and bowels, throw out their aliment indigested, their dung is habitually soft, and of a pale colour, they feed poorly, and get no flesh; to remedy this complaint, give the following purge two or three times, and then the infusion to the quantity of a pint every morning. The signs of indigestion.

TAKE succotrine aloes six drams, The stomach purge.
rhubarb powdered three drams,
myrrh and saffron each a dram:
make into a ball with any syrup.

TAKE zedoary, gentian, winters bark, and orange peel, of each two ounces; pomegranate bark The stomach drink.
and

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and balaustine, of each an ounce;
chamomile flowers and centaury,
each a handful; cinnamon and
cloves, each an ounce: infuse in
a gallon of port or strong beer.

The
bloody
flux de-
scribed.

The bloody flux is a distemper
horses are not very subject to; how-
ever, as it sometimes does occur,
whenever blood is discharged, attend-
ed with gripings, and great pain in the
bowels, if the flux is not speedily re-
strained, the horse probably may soon
be lost; we recommend therefore the
following glyster and drink for that
purpose.

A restrain-
gent glyf-
ter.

TAKE oak bark four ounces,
tormentil root two ounces, burnt
hartshorn three ounces; boil in
three quarts of forge water to
two: strain off, and add two
ounces of diascordium, four
ounces of starch, and half a dram
of opium.

A glyster may also be prepared with
the same quantity of fat broth, starch
and opium, in order to plaister over
the

Of the Lax and Scouring, &c. 137

the coats of the bowels, and abate their violent irritations. Also,

TAKE soft chalk two ounces, A re-
mithridate or diascordium one stringing
ounce, powder of Indian root drink.
half a dram, liquid laudanum
fifty or sixty drops; dissolve in a
pint of hartshorn drink, and add
to it four ounces of cinnamon
water, or red wine; give it twice
a day.

Gum arabic, dissolved in hartshorn
drink, or in common water, should be
the horse's usual drink.

It may be necessary in this place A neces-
to observe, that those scourings that sary obser-
succeed long continued sicknesses, vation.
such as farcys, putrid fevers, or an
inflamed state of blood, where pro-
per bleedings have been neglected, in
general end fatally; especially if the
discharge is a fetid slime, of a dirty
brown colour like brine; and the
same matter runs from their noses:
for in such cases the texture of the
blood is dissolved, and the whole mass

T of

138 *Of the Lax and Scouring, &c.*

of fluids is become putrid, and runs off through these outlets: And as they resemble the colliquative diarrhæas that terminate consumptive cases in the human body, so like them also are they incurable.

Remedies
for cost-
iveness in
horses.

Observa-
tion.

When horses are apt to be costive, from whatever cause it arises, gentle openers should be given, such as cream of tartar, Glauber salts, and lenitive electuary; four ounces of any two of these dissolved in warm ale, whey, or water, given every other morning for two or three times will answer this purpose; especially if assisted by an oily emollient glyster, prepared with a handful of salt; scalded bran, or barley with an ounce of fenugreek, and linseed, occasionally given, will prevent this complaint: But where it is constitutional, and proceeds from the power and force of digestion in the stomach and guts, as sometimes happens, and the horse is otherwise in perfect health, no inconvenience will arise from it; and it is observed that such horses are able to endure great fatigue and labour.

CHAP.

C H A P. XV.

Of WORMS and BOTS.

AUTHORS have described three The different kind of worms described. different sorts of worms that affect horses, viz. Bots, which young horses are often troubled with in the spring: the *Rotundi*, or those resembling earth-worms; and the *Ascarides*; or those about the size of the largest sewing needle, with flat heads.

The bots, which breed in the stomachs of horses, and are sometimes Bots in the stomachs of horses described. the cause of convulsions, appear to be very large maggots, composed of circular rings, with little sharp prickly feet along the sides of their bellies (like the feet of hog-lice) which by their sharpness (like the points of the finest needles) seem to be of use to fasten them to the part where they breed and draw their nourishment, and to prevent their being loosened from such adhesion, before they come to maturity. The eggs from whence

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these bots are produced, are dispersed in clusters all round the lower orifice of the stomach, and are laid under the inner coat, or thin membrane of the stomach; so that when the animals come to form, and life, they burst through this inner coat with their brith and tail strait outwards, and their trunks so fixed into the muscular, or fleshy coat of the stomach, that it sometimes requires a good pull to disengage them: from the blood of this last coat they draw their nourishment, which they suck, like so many leeches, every one ulcerating and purring up the part where it fixes like a honey-comb; and they often make such quick havock, as to destroy the horse.

The signs
of worms.

The symptoms of worms are various. The bots, that many horses are troubled with in the beginning of the summer, are always seen sticking to the strait gut, and are often thrust out with the dung, with a yellowish coloured matter like melted sulphur; they are no ways dangerous there, but are apt to make a horse restless and
uneasy,

uneasy, and rub his breech against the posts. The season of their coming is usually in the months of *May* and *June*, after which they are seldom to be seen, and rarely continue in any one horse above a fortnight or three weeks. Those that take their lodgment in the stomach, are extreme dangerous, by causing convulsions; and are seldom discovered by any previous signs before they come to life, when they throw a horse into violent agonies. *Vide* Convulsions. The other kinds are more troublesome than dangerous; but are known by the following signs: the horse looks lean and jaded, his hair stares as if he was surfeited, and nothing he eats makes him thrive; he often strikes his hind feet against his belly, is sometimes griped but without the violent symptoms that attend a cholic or strangury; for he never rolls and tumbles, but only shews uneasiness, and generally lays himself down quietly on his belly for a little while, and then gets up and falls a feeding; but the surest sign is when he voids them with his dung.

The

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The cure
of bots.

The cure of bots in the stomach we have already taken notice to be giving calomel in large quantities, and repeating it at proper intervals; Æthiops mineral, or some of the under mentioned forms, may be given afterwards.

But bots in the strait gut may be cured by giving the horse a spoonful of favin, cut very small, once or twice a day in his oats or bran, moistened; and three or four cloves of garlick may be added to advantage. Give also an aloetic purge between whites; the following stands recommended.

A purge
for worms

TAKE fine succotrine aloes ten drams; fresh jallap, one dram; aristochia, or birthwort, and myrrh powdered, of each two drams; oil of favin and amber, of each one dram; syrup of buckthorn enough to form into a ball.

But,

Of WORMS *and* BOTS. 143

But, as the source of worms in general proceeds from a vitiated appetite and a weak digestion, recourse must first be had to mercurials; and afterwards to such things as are proper to strengthen the stomach, promote digestion, and by destroying the supposed ova, prevent the regeneration of these animals. Thus, two drams of calomel may be given, with half an ounce of diapente, and mixed up with conserve of wormwood over night; and the next morning the above purge: these may be repeated in six or eight days. Or the following mercurial purge may be given, which will be less troublesome, and no less efficacious.

The general cure of worms.

Mercurial purges proper.

TAKE crude quicksilver, two drams; Venice turpentine, half an ounce; rub the quicksilver till no glistening appears; then add an ounce of aloes, a dram of grated ginger, thirty drops of oil of savin, and a sufficient quantity of syrup of buckthorn to make a ball.

One

One of these balls may be given every six days, with the usual precautions in regard to mercurial physic.

Various
worm me-
dicines re-
commend-
ed.

The various preparations of antimony and mercury must be given several weeks together, in order to get entire riddance of these vermin. The *Æthiops mineral* may be given to the quantity of half an ounce a day; the *mercurius alkalifatus* to two drams a day, incorporated with a bit of cordial ball. The cinnabar powders, as directed in the farcy, are no less effectual: and when worms are bred from high feeding, or unwholesome food, rue, garlick, tanfy, favin, box, and many other simples, may be given successfully, being for that purpose mixed with their food; as also, cut tobacco, from half an ounce to an ounce a day.

Of bad
digestion.

As the generation of worms perhaps principally proceeds from a weak stomach, and bad digestion, if the horse be of a tender constitution, and a bad feeder,

Of the YELLOWS, &c. 145

feeder, the following bitter drink should be given to strengthen his stomach, and mend his digestion; which will prevent the formation of these animals.

TAKE gentian root, zedoary and ^{A stomach} galangals, of each two ounces; ^{drink.} chamomile flowers, and tops of centaury, of each two handfuls; Jesuits bark powdered, two ounces; filings of iron half a pound; juniper berries four ounces; infuse in three gallons of ale for a week, shaking the vessel now and then: and give a pint of this night and morning.

CH A P. XVI.

Of the YELLOWS *or* JAUNDICE.

HORSES are frequently subject ^{The} to this distemper; which is ^{symptoms} known by a dusky yellowness of the ^{of the} eyes; the inside of the mouth and lips ^{jaundice} described. ^{the}

U

the tongue, and bars of the roof of the mouth, looking also yellow. The horse is dull, and refuses all manner of food; the fever is slow, yet both that and the yellowness increase together. The dung is often hard and dry, of a pale yellow, or light pale green. His urine is commonly of a dark dirty brown colour, and when it has settled some time on the pavement, it looks red like blood. He stales with some pain and difficulty; and if the distemper is not checked soon grows delirious and frantick. The off side of the belly is sometimes hard and distended; and in old horses, when the liver has been long diseased, the cure is scarce practicable, and ends fatally with a wasting diarrhæa: but when the distemper is recent, and in young horses, there is no fear of a recovery, if the following directions are observed.

The cure. First of all bleed plentifully; and give a laxative glyster, as horses are apt to be very costive in this distemper; and the next day give him this purge.

TAKE

JAUNDICE.

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TAKE of Indian rhubarb powdered, one ounce and a half; saffron two drams, succotrine aloes six drams; syrup of buckthorn a sufficient quantity. A purge for the jaundice.

If the rhubarb should be found too expensive, omit it, and add the same quantity of cream of tartar, and half an ounce of Castile soap, with four drams more of aloes. This may be repeated two or three times, giving intermediately the following balls and drink.

TAKE of Æthiops mineral half an ounce; millepedes the same quantity, Castile soap one ounce; make into a ball, and give one every day, and wash it down with a pint of this decoction. The opening ball.

TAKE madder root and turmeric, of each four ounces; burdock root sliced half a pound; Monk's rhubarb four ounces; liquorice sliced two ounces: boil in a gallon of forge water to three quarts; strain off, and sweeten with honey. The opening drink.

U 2

Balls

Balls of Castile soap and turmeric may be given also for this purpose, to the quantity of three or four ounces a day; and will in most recent cases succeed.

Mercuri-
als some-
times ne-
cessary.

By these means the distemper generally abates in a week; which may be discovered by the alteration in the horse's eyes and mouth; but the medicines must be continued till the yellowness is intirely removed. Should the distemper prove obstinate, and not submit to this treatment, you must try more potent remedies, *viz.* mercurial physick, repeated two or three times at proper intervals; and then the following balls:

Alterative
balls for
the jaundice.

TAKE salt of tartar two ounces, cinnabar of antimony four ounces, live millepedes and filings of steel, of each three ounces; saffron half an ounce; Castile or Venice soap half a pound: make into balls of the size of a pullet's egg with honey, and give one night and morning, with a pint of the above drink.

It

It will be proper on his recovery to give two or three mild purges, and if a full fat horse to put in a rowel.

C H A P. XVII.

*Of the Disorders of the Kidneys
and Bladder.*

THE signs of the *kidneys* being hurt or affected, are a weakness of the back and loins, difficulty of *staling*, faintness, loss of appetite, and deadness in the eyes; the urine is thick, foul, and sometimes bloody, especially after a violent strain. A horse diseased in his kidneys can seldom back, that is, move strait backwards, without pain, which is visible as often as he is put to the trial: the same thing is observable indeed in horses, whose backs have been wrung and wrenched, but with this difference, that in the latter, there is seldom any defect

defect or alteration in the urine, except that it is higher coloured.

The
remedy.

Bleeding is the prime remedy, and that plentifully, in order to prevent inflammation; and the more so, if a fever attends a difficulty in staling, for then we may suspect the kidneys already inflamed. A rowel in the belly has been found useful, and the following balls may be given twice or thrice a day, with a pint of marshmallow decoction, in which half an ounce of gum arabic is dissolved, with an ounce of honey.

A
strengthening
ball.

TAKE lucatellus balsam one ounce, sperma ceti six drams, sal prunellæ half an ounce; mix into a ball with honey: if the urine is bloody, add half an ounce of japan earth.

Should the fever continue, bleed largely, give emollient glysters, and the cooling opening drink, till it abates.

If

If the urine passes with difficulty and pain, notwithstanding these means, give this ball, and repeat it twice or thrice a day, till the horse stales freer and without pain, his urine becomes of a right consistence, and is free from any purulent settlement.

TAKE balsam of copivi, or Strasbourg turpentine, and Venice soap of each one ounce; nitre six drams; myrrh powdered two drams: make into a ball with honey, and wash it down with the marshmallow decoction.

But if this method should not be successful, and the urine continues turbid, grows coffee-coloured, or fetid, the horse losing his appetite and flesh, it is a sure sign of ulceration in the kidney; which if the above remedies do not soon remove, you may depend on it the horse will go into a consumption, and is incurable.

As a suppression of urine arises sometimes from an inflammation of the kidney;

The causes of suppression of urine.

kidney; so at others from a paralytic disorder, disabling them in their office of separating the urine from the blood: in the latter case the bladder is usually empty, so that a horse will make no motions to stale, and if he continues a few days in this condition, his body will swell to a great degree, breaking out in blotches all over, and death will soon close the scene.

The cure. If it arises from inflammation, bleed largely, and treat the horse as above recommended; but if not, give stimulating glysters, and strong diureticks, such as the following balls once in four hours; for if a horse stales not in thirty hours, his danger must be great.

A stimulating
diuretic
ball.

T A K E juniper berries powdered one ounce, sal prunellæ six drams, ætherial oil of turpentine half an ounce, camphor one dram, oil of juniper two drams; make into a ball with honey, and give after it three or four horns of the marshmallow decoction and honey.

Or,

Or,

The following, which is more forcing, and should be given with caution.

TAKE cantharides well dried, from one scruple to half a dram; camphor dissolved in oil of almonds, from one dram to two; Venice soap an ounce; mix into a ball with syrup of marshmallows.

Another
ball more
stimulating.

When this last ball is given, the horse should be made to drink plenty of water with gum arabic dissolved in it; the following glyster may also be given at the same time.

TAKE of Barbadoes aloes two ounces; the same quantity of Venice turpentine beat up with the yolks of two eggs; jallap powdered two drams; juniper and bay-berries each an handful, bruised and boiled in two quarts of a decoction of mallows; strain off and mix by degrees with the above, to which add a pint of linseed oil.

A stimulating
glyster.

An embrocation, and stimulating poultice.

If the complaint is not removed by these means, rub the horse's reins well with two parts of oil of turpentine, and one of oil of amber; and apply a poultice of garlick, horse-radish, mustard-seed, camphor, and green soap, spread on thick cloth, over them. Give the horse also two drams of calomel over night, and a moderate purge the next morning. These perhaps, are the chief and best remedies that can be given in this generally fatal disorder.

The strangury how to be treated.

When the *strangury* in a horse does not arise from wind, or dung pressing on the neck of the bladder (as we observed in the chapter of cholick) the cause is from inflammation, or too long a retention of the urine. Such horses make frequent motions to stale, stand wide and straddling, are full, and have their flanks distended. In this case bleed largely; give the following drink, and repeat it every two hours, for two or three times, till the horse is relieved.

TAKE

Kidneys and Bladder.

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TAKE Venice turpentine broke with the yolk of an egg one ounce, nitre or sal prunellæ six drams, half a pint of sweet oil, and a pint of white wine. A drink for the strangury.

If this drink should not have the desired effect, the diuretic ball above mentioned may be given in the same manner, omitting the myrrh.

Give the horse plenty of the marsh-mallow decoction, in a quart of which dissolve an ounce of nitre and gum arabic, and two of honey.

Horses subject to a *diabetes*, or profuse staling, if old, or of a weak constitution, are seldom cured; they soon lose their flesh and appetite, grow feeble, their coat staring, and they die rotten. Of a young horse there is more hopes; but he must not be indulged with too much water, or moist food. Give him the following: A diabetes how treated.

TAKE Jesuits bark four ounces, bistort and tormentil root, of each A drink for a diabetes.

X 2

each

Of the Disorders of, &c.

each two ounces, gum arabic eight ounces: boil in two gallons of lime-water to the consumption of half, and give a pint three times a day.

Let the horse drink two or three quarts a day of lime-water; and if these medicines should not succeed, give a quart of strong allum posset, three or four times a day.

This method is proper also for a horse who stales blood; or the following balls may be given for that purpose, if the bleeding is profuse.

Balls for
pissing
blood,

TAKE bole armoniac one ounce, japan earth half an ounce, roch allum two drams, elixir of vitriol one dram; make into a ball with conserve of roses, and give it every six hours,

As this disorder generally proceeds from too violent exercise, over straining, &c. repeated bleedings in small quantities are absolutely necessary, till the mouths of the vessels close up.

C H A P.

C H A P. XVIII.

Of Molten - Greafe.

BY molten-greafe is meant a fat Molten-Greafe, what. or oily discharge with the dung, and arises from a colliquation or melting down of the fat of the horse's body, by violent exercise in very hot weather. It is always attended with a fever, heat, The symptoms of it. restlessness, starting and tremblings, great inward sickness, shortness of breath, and sometimes with the symptoms of a pleurisy. His dung will be extremely greasy, and he will fall into a scouring; his blood will have a thick skin of fat over it when cold, of a white or yellow hue, but chiefly the latter; the congealed part or sediment is commonly a mixture of size and greafe, which makes it so extremely slippery, that it will not adhere to the fingers, and the small portion of serum feels also slippery and clammy. The horse soon loses his flesh and fat, which probably is dissolved and absorbed into the blood; and those that survive this shock, commonly grow hide-bound for a time, there

their legs swelling both before and behind, and continue in this state till the blood and juices are rectified; and if this is not done effectually, the farcy, or some obstinate surfeit, generally follows, very difficult to remove.

The cure. In the first place bleed plentifully, and repeat it for two or three days successively in smaller quantities; two or three rowels should also be immediately put in, and cooling emollient glysters daily thrown up to abate the fever, and drain off the greasy matter from the intestines. By the mouth give plenty of warm water, or gruel, with cream of tartar, or nitre, to dilute and attenuate the blood; which in this case is greatly disposed to run into grumes, and endanger a total stagnation.

When the fever is quite gone off, and the horse has recovered his appetite, gentle aloetic purges should be given once a week for a month or six weeks, in order to bring down the swelled legs; but if the purgative ingredient does not exceed half an ounce or six drams of fine aloes, it only
opens

opens the belly gently; and, with the other medicines joined with it, passes into the blood, acts as an alterative, and operates both by urine and perspiration; as will appear by the horse's staling plentifully, and the kindly feel of his skin. To this end give the following, which repeated for some time, will intirely remove this disorder.

TAKE of succotrine aloes six An alterative purge drams, of gum guaiacum powdered half an ounce, of diaphoretic antimony, and powder of myrrh, of each two drams; make into a ball, with syrup of buckthorn.

Or it may be prepared with an ounce of aloes, six drams of diapente, and a spoonful of oil of amber.

These will seldom take a horse from his business above two or three days in a week; neither will he lose his flesh or appetite with them, but on the contrary, mend in both; which cannot be obtained by any other method of purging, and give this greatly the preference in many cases.

CHAP.

C H A P. XIX.

Of Surfeits, Mange, and Hide-Bound.

Surfeits arise from various causes ; but are commonly the effects of some diseases not attended to, or that have been ill-cured.

Surfeits described.

A horse is said to be surfeited, when his coat stares, and looks rusty and dirty, though proper pains has not been wanting to keep him clean. The skin is full of scales and dander that lays thick and mealy among the hair, and is constantly supplied with a fresh succession of the same, for want of due transpiration. Some horses have hurdles of various sizes, like peas or rares: some have dry fixed scabs all over their limbs and bodies ; others a moisture attended with heat and inflammation ; the humours being so sharp, and violently itching, that the horses rub so incessantly, as to make themselves raw. Some have no eruptions

tions at all, but an unwholesome look, and are dull, sluggish and lazy: some appear only lean and hide-bound: others have flying pains and lameness, resembling a rheumatism: so that in the surfeits of horses, we have almost all the different species of the scurvy, and other chronical distempers.

The following method is usually attended with success in the dry species: First take away about three or four pounds of blood; and then give the following mild purge, which will work as an alterative, and should be repeated once a week or ten days for some time. The cure.

TAKE succotrine aloes six drams or one ounce; gum guaiacum half an ounce; diaphoretic antimony, and powder of myrrh, of each two drams: make into a ball with syrup of buckthorn. An alterative purge

In the intermediate days an ounce of the following powder should be given morning and evening in his feeds.

Y

TAKE

The
alterative
powders.

TAKE native cinnabar, or cinnabar of antimony, finely powdered, half a pound; crude antimony, in fine powder, four ounces; gum guaiacum, also in powder, four ounces: make into sixteen doses, for eight days.

This medicine must be repeated till the horse coats well, and all the symptoms of surfeit disappear. If the horse is of small value, two or three common purges should be given, and half an ounce of antimony, with the same quantity of sulphur, twice a day.

If the little scabs on the skin do not peel off, anoint them with the mercurial ointment; during the time of using which, it will be proper to keep the horse dry, and to give him warm water. This ointment properly rubbed into the blood, with the assistance of purging physick, has frequently cured these kind of surfeits, without any other assistance.

The moist
surfeit de-
scribed.

The wet surfeit, which is no more than a moist running scurvy, appears on

on different parts of the body of a horse, attended sometimes with great heat and inflammation; the neck oftentimes swells so in one night's time, that great quantities of a hot briny humour issue forth, which, if not allayed, will be apt to collect on the poll or withers, and produce the poll-evil or fistula. This disease frequently also attacks the limbs, where it proves obstinate and hard to cure; and in some horses shews itself spring and fall.

In this case bleed plentifully, avoid The cure. externally all repellers, and give cooling physick twice a week; as, four ounces of laxative electuary, with the same quantity of cream of tartar; or the latter, with four ounces of Glauber salts, quickened, if thought proper, with two or three drams of powder of jallap, dissolved in water gruel, and given in a morning fasting.

After three or four of these purges, two ounces of nitre made into a ball with honey, may be given every morning for a fortnight; and if attended with success, repeated for a fortnight longer.

The powders above mentioned may also be given with the horse's corn; or a strong decoction of guaiacum shavings, or logwood, may be given alone, to the quantity of two quarts a day. These, and indeed all alterative medicines, must be continued for a long time, where the disorder proves obstinate.

Hide-
Bound,
how
treated.

The diet should be cool and opening, as scalded bran or barley; and if the horse is hide-bound, an ounce of fenugreek seeds should be given in his feeds for a month or longer; and, as this disorder often proceeds from worms, give the mercurial physick too, and afterwards the cinnabar powders, as above directed; but as in general it is not an original disease, but a symptom only of many, in the cure regard must be had to the first cause: thus as it is an attendant on surfeits, fevers, worms, &c. the removal of this complaint must be variously effected.

In

In a mangy horse the skin is generally tawny thick, and full of wrinkles, especially about the mane; the loins, and tail, and the little hair that remains in those parts stands almost always strait out or bristly: the ears are commonly naked and without hair, the eye and eye-brows the same; and when it affects the limbs, it gives them the same aspect; yet the skin is not raw, nor peels off, as in the hot inflamed surfeit.

The
mange de-
scribed.

Where this distemper is caught by infection, if taken in time it is very easily cured; and I would recommend the mercurial ointment as most effectual, rubbed in every day, now and then interposing a purge. To purify and cleanse the blood, give antimony and sulphur for some weeks after. There are a great variety of external remedies for this purpose, such as train oil and gunpowder, sulphur ointments, tobacco steeped in chamber-lye, &c. But when this disorder is contracted by low feeding and poverty of blood, the diet must be mended, and the horse properly indulged with
hay

hay and corn. The mercurial ointment may be had at the apothecaries, or may be thus prepared :

The
mercurial
ointment.

TAKE quicksilver one ounce,
Venice turpentine a quarter of an
ounce ; rub them together till
the globules of the quicksilver
disappear ; then add by degrees
four ounces of hogs lard.

CHAP. XX.

Of the FARCIN, or FARCY.

The farcy
described.

THE true farcy is properly a distemper of the blood vessels, which generally follows the tract of the veins, and when inveterate, thickens their coats and integuments, so that they become like so many chords. I shall not describe the different sorts of farcys, seeing they are only degrees of one and the same distemper ; but proceed to paint the distemper by its symptoms, which are pretty manifest to the eye. At

At first one or more small swellings, ^{The} ~~symptoms~~ or round buds like grapes or berries, spring out over the veins, and are often exquisitely painful to the touch; in the beginning they are hard, but soon turn into soft blisters, which, when broke, discharge an oily or bloody ichor, and turn into very foul and ill disposed ulcers. In some horses it appears on the head only; in some on the external jugular; in others on the plate vein, and runs downwards on the inside of the fore-arm towards the knee, and very often upwards towards the brisket; in some the farcy shews itself on the hind parts, about the pasterns, and along the large veins on the inside of the thigh, rising upwards into the groin, and towards the sheath; and sometimes the farcy makes its appearance on the flanks, and spreads by degrees towards the lower belly, where it often becomes very troublesome.

When the farcy appears on the head ^{When} only, it is easily cured; especially ^{most fa-} when it is seated in the cheeks and ^{vourable.} forehead, the blood vessels being here small:

small: but it is more difficult when it affects the lips, the nostrils, the eyes, and kernels under the jaws, and other soft and loose parts, especially if the neck vein becomes chorded. When it begins on the outside of the shoulder or hips, the cure is seldom difficult; but when the farcy arises on the plate vein, and that vein swells much, and turns chorded, and the glands or kernels under the arm-pit are affected, it is hard to cure; but more so when the crural veins within side of the thigh are chorded, and beset with buds, which affect the kernels of the groin, and the cavernous body of the yard. When the farcy begins on the pasterns or lower limbs, it often becomes very uncertain, unless a timely stop be put to it; for the swelling in these dependant parts grow so excessively large in some constitutions, and the limbs so much disfigured thereby with foul sores and callous ulcerations, that such a horse is seldom fit for any thing afterwards, but the meanest drudgery: but it is always a promising sign, wherever the farcy happens to be situate,

situate, if it spreads no further. It is usual to affect only one side at a time, ^{When the} but when it passes over to the other, ^{suppurates} it shews great malignancy; when it arises on the spines, it is then for the most part dangerous, and is always more so to horses that are fat and full of blood, than to those that are in more moderate case. When the farcy is epidemical, as sometimes happens, it rises on several parts of the body at once, forms nasty foul ulcers, and makes a profuse running of greenish bloody matter from both nostrils; and soon ends in a miserable rot.

From this description of the farcy, ^{Several} it will appear how greatly ^{persons} those may ^{of time} be disappointed who depend on some single specific drink or ball for a certain cure; for the symptoms are sometimes so favourable, that it is easily conquered by a very simple management; and when it arises superficially upon the smaller vessels, it will often go off, with moderate labour, without any other means than bleeding. Such instances as these may easily give a reputation

putation to things of no great efficacy, and bring them into esteem: but whoever has acquired any true notion of the farcy, will know that this distemper is not to be conquered but by such things as are fitly adapted to the various symptoms that occur in the different stages of it. To avoid therefore the perplexity that arises from the various complications so usual in the farcy, we shall consider it in its different states, or degrees, *viz.* when it seizes only the smaller vessels; when the larger veins are chorded, and the feet, pasterns, and flanks affected; and lastly, when the farcy beginning on one side only breaks out on the other also, and affects the whole body.

The first
stage of
the farcy.

When the farcy makes its first appearance on the head, it rises on the cheeks and temples, and looks like a net-work, or small creeping twigs full of berries. Sometimes it inflames the eye, and sometimes little blisters or buds run along the side of the nose. It arises often on the outside of the shoulder, running along the small veins
with

with heat and inflammation: and sometimes a few small buds appear near the withers, and on the outside of the hip. In all these appearances the disease being superficial, and affecting only the smaller vessels, is easily conquered by the following method, when taken in time; for the simplest farcy, if neglected, may degenerate into the worst sort.

This distemper then being of an inflammatory nature, and in a particular manner affecting the blood vessels, must necessarily require large bleeding, particularly where the horse happens to be fat and full of blood. This always checks the beginning of a farcy, but is of small service afterwards; and if a horse is low in flesh, the loss of too much blood sometimes proves injurious. After bleeding, let the horse have four ounces of cream of tartar and lenitive electuary; which may be given every other day for a week, to cool the blood and open the body; and then give nitre three ounces a day, for three weeks or a month;

Bleeding almost always necessary.

and anoint the buds and swelling with the following ointment twice a day.

An ointment for the buds.

TAKE ointment of elder four ounces, oil of turpentine two ounces, sugar of lead half an ounce, white vitriol powdered two drams ; mix together in a gally-pot.

The buds sometimes by this method are dispersed, leaving only little bald spots, which the hair soon covers again. When they break and run, if the matter be thick and well-digested, they will soon be well : but in order to confirm the cure, and to disperse some little lumps, which often remain for some time on the skin without hair, give the liver of antimony for a month ; two ounces a day for a fortnight, and then one a day for the other fortnight ; by following this method, a farcy which affects only the small vessels, may be stopped in a week or ten days, and soon after totally eradicated.

When

When the farcin affects the larger blood vessels, the cure is more difficult; but let it always be attempted early: therefore on the plate, thigh or neck veins appearing chorded, bleed immediately on the opposite side, and apply the following to the chorded vein.

When the larger veins are affected, the cure is more difficult.

T A K E oil of turpentine in a pint bottle six ounces, oil of vitriol three ounces; drop the oil of vitriol into the oil of turpentine by little at a time, otherwise the bottle will burst; when it has done smoaking, drop in more oil of vitriol, and so on till all is mixed.

A liniment to anoint the chorded veins.

This mixture is one of the best universals in a beginning farcy; but where it is seated in loose fleshy parts, as flanks or belly, equal parts of the oil of vitriol and turpentine are necessary.

Rub the parts first with a woollen cloth; and then apply some of the mixture over the buds, and wherever there is any swelling, twice a day.

Give

Give the cooling physick every other day; and then three ounces of nitre every day for some time. This method must be continued till the buds digest, and the chord dissolves; and when the sores run plentifully, the matter digests well, and the lips and edges are no ways thick or callous, you may expect a speedy recovery; yet to confirm the cure, and prevent a relapse, give the liver of antimony or crude antimony, as above directed; and to heal the sores and smooth the skin, dress with bees-wax and oil.

The farcy
on the
flanks, dif-
ficult of
cure.

When the farcy begins on the flanks, or towards the lower belly, it often takes its rise from a single puncture of a sharp spur. The pain and smarting is one sure sign to distinguish the farcy from common accidents: the staring of the hair which stands up like a tuft all round the buds or blisters, and the matter that issues from the buds, which is always purulent and of a clammy greasy consistence, are other certain signs. After bathing with the mixture above mentioned till the
ulcers

ulcers are smooth and healing, should the swelling not subside, to prevent the spreading of the buds, and to disperse them, bathe with either of these mixtures as far as the centre of the belly; and at the same time give a course of antimonials, as will presently be prescribed.

TAKE spirits of wine four ounces, oil of vitriol and turpentine of each two ounces, white wine vinegar or verjuice six ounces. Discutient and repellent washes.

Or, the following:

TAKE spirits of wine rectified four ounces, camphor half an ounce, vinegar or verjuice six ounces, white vitriol dissolved in four ounces of spring water one ounce; mix together.

In the lower limbs the farcy lies sometime concealed for a great while, and makes so slow a progress, that it is often mistaken for grease, or for a blow or kick, and goes by the general appellation of a humour settled there. In order to distinguish the one from the The farcy how distinguished from the greafe.

the other, we shall observe that a kick, or bruise, is generally attended with a sudden swelling, or a contused wound, which for the most part digests easily: The grease is also a smooth swelling that breaks out about the bending of the pasterns backwards; but the farcy begins on the pastern joint usually with one bud, and runs upwards like a knotted crab-tree.

The general method of cure.

Very simple means has sometimes stopped it, before it has began to spread; a poultice with bran and verjuice bound round the part, and renewed once a day, will often alone succeed; and if proud flesh should arise, touch it with oil of vitriol, or aqua fortis, an hour before you apply the poultice; for when the distemper is local, as we suppose it here, it is to be conquered by outward applications.

When the distemper grows inveterate, and resists the above method, and the vessels continue chorded, *Gibson* recommends the following mixture.

TAKE

T A K E linseed oil half a pint; oil of turpentine and petre, of each three ounces; tincture of euphorium and hellebore, of each two drams; the soldiers ointment two ounces, or oil of bays; oil of origanum half an ounce; double aqua fortis half an ounce: after the ebullition is over, add two ounces of Barbadoes tar.

A mixture
for an in-
veterate
farcy.

Rub this into the chorded veins, and wherever there is a swelling, once in two or three days; but if the orifices are choaked up with proud flesh, or the skin so much thickened over the ulcers as to confine the matter, in either case it is necessary to make an open passage with a small hot iron, and destroy the proud flesh, after which it may be kept down by touching with oil of vitriol, aqua fortis, or butter of antimony. A salve may also be prepared with quicksilver and aqua fortis, rubbing any quantity of the former with enough of the latter, to the consistence of a liniment; smear the ulcers with this whenever they appear foul,

How the
buds
should be
dressed.

A a

and

178 *Of the F A R C I N, or*

and you will find it preferable to most other eating medicines.

Cautions
in regard
to the use
of subli-
mate.

Our farriers, after opening the buds, put in usually a small quantity of corrosive sublimate or arsenic, which they call coring out the farcy: this may answer where the buds are few, and not situated near large blood vessels, joints or tendons: Others use Roman vitriol, or sublimate and vitriol, in equal quantities: but let it be remembered, that many a horse has been poisoned by these medicines ignorantly used, and in too large quantities; which should be a caution to huntsmen not to suffer their hounds to feed on the carcases of farcy'd horses, as the greatest part of a pack have been poisoned by that means.

Very deli-
perate me-
thods used
in the cure
of the
farcy.

I shall now mention some of the desperate methods, and more violent kind of medicines given by some internally: thus, from four to eight ounces of lapis calaminaris, to which two ounces of tutty finely powdered is added, with other metallic substances, have been given. Some give a pound of

of barrel soap boiled in stale beer, with savin, rue, and other herbs of that intention:-- Others go yet further, being determined to kill or cure, by giving drinks prepared with green vitriol, roch allum, Roman vitriol, oil of vitriol, boiled in chamberlye, with hemp-seed, hemlock, and common salt. Those who use nothing but the decoctions or juices of herbs, such as wormwood, rue, or elder particularly, stand a much better chance for a cure, if given in time; but when the distemper is grown inveterate, nothing comes in competition with mercurial and antimonial medicines.

The following balls are proper in every state of the farcy; and when the distemper has been in its infancy, before the skin was much defaced, has often cured it in a week or two, by giving them only once or twice a day: but in an old farcy they should be given for two or three months together.

TAKE of native cinnabar, or cinnabar of antimony eight ounces; long birthwort and gum guaiacum

The alternative balls.

cum powdered, of each four ounces: make into a paste with honey, and form into balls of the size of a large walnut, and roll them in liquorice-powder.

Mercurials generally successful, when given with skill.

The tediousness of this course has encouraged the giving of mercurials, and indeed where they are directed with skill, they must be attended with success; the stronger preparations indeed, as the red and white precipitates, and turbith, being combined with sharp saline parts may be hazardous and injurious, but the latter given in small quantities, has been found very successful in such kind of inveterate obstinate disorders. Mr. *Gibson* says he has given it to a dram at a dose, where the limbs have been greatly swelled; that in forty eight hours the sores were all dried up, and the limbs reduced; but that it made the horse so violently sick for several days, and scoured him to such a degree, that it could not be repeated.

One would have thought that the success attending this medicine so suddenly might have encouraged *Gibson* to have made further trials in smaller quantities, which had he done, it is more than probable he would not have been disappointed: for the grand secret in giving mercurials as alteratives, is the introducing them into the blood without operating on the stomach and bowels; and to do this effectually, they must be given in small quantities, and so bridled, as to controul their force on the first passages; taken in this manner, they will mix gradually with the blood and juices, and operate both effectually and safely. The method I would recommend is as follows: give one scruple or half a dram of turbit, mixed into a ball with an ounce of Venice soap, every other night for a fortnight, then abstain a week or ten days, and repeat again. Should this ball purge, or make the horse sick, mix it up with half an ounce of philonium, or with four or five grains of opium; with these restrictions it may be given for some

*Turbith
frankincense
gives in
small
quantity
at a time.*

*Balls with
turbith re-
commended.*

some weeks; but should the horse's mouth be found tender or sore, you must refrain giving till that complaint is removed by gentle purges; and then return to it again: during the whole course, particular care should be taken that he gets no cold. *Vide* Chap. ALTERATIVE.

An altera-
tive mer-
curial ball

Two ounces of quicksilver divided with an ounce of turpentine, and made up into four balls with diapente and gum guaiacum, of each two ounces, and a sufficient quantity of honey, have for this purpose been successfully given, one ball twice a week; but gentle purgatives should be interposed, to prevent a salivation, which some horses are very prone to, on taking mercurials, though in small quantities.

Dr. *Bracken* recommends the knots and chords to be rubbed with the mercurial ointment before they break, in order to disperse them, and after breaking to dress the sores with equal parts of Venice turpentine and quicksilver; if by these means the mouth should

should become fore, treat as above.—
This method seems to be effectual
with proper care.

The following is also recommended
by the same Gentleman :

TAKE butter of antimony and
bezoar mineral, of each one An altera-
tive ball.
ounce ; beat up with half a pound
of cordial ball, and give the big-
ness of a walnut, or three quarters
of an ounce, every day for two
or three weeks, fasting two or
three hours after it.

As most preparations from antimony
are of use in the farcy, from two
drams of antihecticum poterii to half
an ounce, may be given with a bit of
cordial ball, every other day, for some
time ; for in these obstinate cases the
very crasis of the blood must be altered,
which can only be effected by degrees,
and of course is a work of time.

We shall here take notice of what The water
farcy, or
dropfy.
is called the water farcy, which has no
resemblance to a true farcy, either in
its

its cause, symptoms or effects, but has only obtained this name through custom and ignorance.

The dropſy of two kidneys This water farcy then is of two kinds; one the product of a feverish disposition, terminating on the skin, as often happens in epidemical colds; the other is dropſical, where the water is not confined to the belly and limbs, but ſhews itſelf in ſeveral parts of the body, by ſoft ſwellings yielding to the preſſure of the finger. This laſt kind uſually proceeds from foul feeding, or from the latter grafs and fog, that often comes up in great plenty with continued cold rains, and breeds a ſluggiſh viſcid blood. In the former caſe I have ſeen the limbs and whole body enormously ſwelled and very hard, the belly and ſheath greatly diſtended; which were as ſurpriſingly reduced in four and twenty hours by ſlight ſcarifications within ſide the leg and thigh with a ſharp penknife, and three or four ſtrokes on the ſkin of the belly on each ſide the ſheath; from theſe ſcarifications there was a conſtant and

Scarifying
the ſkin,
ſometimes
very effec-
tual.

and surprizing large dripping of water, which soon relieved the horse; when a few proper purges compleated his recovery.

In the other species of dropsy the curative intentions are to discharge the water, recover the crasis or strength of the blood, and brace up the relaxed fibres throughout the whole body. To this end, purge once a week or ten days; and give intermediately either of the following drinks:

TAKE black hellebore fresh gathered two pounds; wash, bruise and boil in six quarts of water to four, then strain out the liquor, and put two quarts of white wine on the remaining hellebore, and let it infuse warm forty eight hours, then strain off, mix both together, and give the horse a pint night and morning.

An alterative drink

TAKE of the leaves and bark of elder, of each a large handful; chamomile flowers half a handful, juniper berries bruised two

A diuretic drink.

B b

ounces

Of the F A R C I N, or

ounces; boil in a quart of water to a pint and half, to which add honey and nitre, of each one ounce.

Give this drink every night, or night and morning: and to compleat the cure, and strengthen the whole body, give a pint of the subsequent infusion every morning for a fortnight, fasting two hours after it.

A
strengthening drink

TAKE gentian root and zedoary of each four ounces; chamomile flowers and the tops of centaury, of each two handfuls; Jesuits bark powdered two ounces; juniper berries four ounces; filings of iron half a pound: infuse in two gallons of ale for a week, shaking now and then the vessel.

Before we close this chapter, we think proper to lay down the symptoms of an incurable farcy, that the owners of such horses may save themselves unnecessary expence and trouble in their endeavours to obtain a cure.

When

When a farcy by improper applications, or by neglect has spread and increased; or after long continuance resisted the medicines above recommended; if fresh buds are continually sprouting forth, while the old ones remain foul and ill conditioned; if they rise on the spines of the back and loins; if the horse grows hide-bound, and runs at the nose; if abscesses are formed in the fleshy parts between the interstices of the large muscles; if his eyes look dead and lifeless; if he forsakes his food, and scours often, and his excrements appear thin and of a blackish colour; if the plate, or thigh vein continue large and chorded after firing, and other proper applications: these symptoms denote the distemper to have penetrated internally, and that it will degenerate into an incurable consumption: it is most probable also, that the whole mass of fluids are tainted, and become irremediable by art.

The
symptoms
of an in-
curable
farcy.

C H A P. XXI.

Of Alterative Medicines.

What is
meant by
alterative
medicines. **B**Y alteratives, or *altering* medicines, are to be understood such as having no immediate sensible operation, gradually gain upon the constitution, by changing the humours or juices from a state of distemperature to health. This intention in some cases may perhaps be effected by correcting the acrimony of the juices, and accelerating the blood's motion; and in others by attenuating, or breaking its particles, and dividing those cohesions which obstruct the capillaries, or finer vessels; and so promote the due secretions of the various fluids. It is certain that many have but an indifferent opinion of a medicine, that does not operate externally, and gratify their senses with a quantity of imagined *humours* ejected from the body: but let such people remember that there are good humours as well as bad, which

which are thrown off together ; that no evacuating medicine has a power of selecting, or separating the bad from the good ; and consequently that they are thrown out only in a proportionate quantity. These few hints may be sufficient to convince the judicious reader of the great advantages arising from alteratives, and the preference due to them, in most cases over purgatives ; unless it could be proved, as already mentioned, that the latter could cull out, and separate from the blood the bad humours solely, leaving the good behind ; but this elective power has long been justly exploded as ridiculous and uncertain, since it is plain that all kinds of purging medicines differ only in degree of strength, and operate no otherwise upon different *humours*, than as they stimulate more or less.

Are often
to be preferred
to
purgatives.

We shall therefore take this opportunity of recommending some alterative medicines, which are not so generally known as they ought to be ; and that too on the surest grounds, a proper

Nitre recommended as an alterative.

proper experience of their good effects in repeated trials. The first then is nitre or purified salt petre, which has long been in great esteem, and perhaps is more to be depended on in all inflammatory fevers than any other medicine whatever: but besides this extensive power of allaying inflammatory disorders, it is now offered as a remedy, taken in proper quantities, as an alterative for surfeits, molten-grease, hide-bound, grease-heels, &c. And as it has been known to succeed even in the cure of the farcy, what other distempers in horses, arising from vitiated fluids may it not be tried on, with a strong probability of success? This great advantage will arise from the use of this medicine over most others. that as its operation is chiefly by urine, it requires no confinement or cloathing; but the horse may be worked moderately throughout the whole course. This medicine has been found equally efficacious (by many trials made in one of our hospitals) in correcting the acrimony of the juices, and disposing the most obstinate and inveterate sores to heal

heal up; and hence probably it came to be recommended as an alterative to our horses.

The quantity of nitre given at a time should be from two to three ounces a day; let it be finely powdered, and then mix with it by little at a time as much honey as will form it into a ball; give it every morning fasting for a month; or it may be given at first for a fortnight only, intermitting a fortnight, and then repeat it. If it be observed that the horse shews an uneasiness at the stomach after taking it, a horn or two of any liquor should be given after it, or it may be dissolved at first in ale, water, or gruel; though the ball where it agrees, is the easiest method of giving.

Nitre,
how to be
given.

Besides the mercurial medicines recommended in the farcy, which we have already animadverted on, in very obstinate cases, the following method of giving turbith has been found extremely successful, after bleeding the horse twice or thrice, if full of blood, and in flesh.

TAKE

A mercurial alterative.

T A K E turbith mineral one dram,
diapente one ounce; make into
a ball with honey.

Give one of these balls every other morning for a fortnight; rest a fortnight, and then repeat them in the same manner. During this course the horse should be kept warm, in order to heighten the perspiration; and particular care should be taken that he catches no cold: let him be bled once in ten days about two quarts; and those days the balls are omitted, take him out for half an hour, if the weather is fair, and when he comes in, let him be well curried for an hour; after this course is finished, give him a quart of hemp-feed in his corn every day for a month: but as the horse's mouth will probably be sore, his feed should be boiled oats, barley, and scalded bran.

Mercurials operate uncertainly on horses.

As the operation of mercurials both in men and horses is very precarious, if the quantity above mentioned gripes the horse or purges him, instead of the

the diapente mix it up with half an ounce of philonium, or half a scruple of opium; should it affect his mouth so much as to render him incapable of eating even soft food, the purging drink should be given him, so as to procure three or four stools every day, and the ball forborn till this complaint is removed. But this medicine I think may in some horses succeed better, by giving the turbith in less quantities, and for a longer time, a scruple every night, or half a dram every other night; which method I think safest to begin with, in order to judge of the horse's constitution; and as have more particularly explained in the chapter on FARCY. After this course, a strong decoction of guaiacum, or the alterative powders, should be given for a month: or lime water may be given for his constant drink, at first mixed with his water, afterwards alone.

The guaiacum decoction may be prepared thus:

TAKE of the shavings of guaiacum two pound, liquorice root The
sweetning
drink.
Cc sliced

sliced four ounces, crude antimony, grossly powdered and put into a bag, one pound; boil in three gallons of spring water for an hour, and keep the decoction upon the ingredients in a clean earthen pan for use.

In what
cases to be
given.

This is both a cheap and efficacious medicine in all foulness of the skin, and very proper to be given after a course of mercurials; for it will sweeten and correct the blood and juices, and, by promoting the secretions, dry up superfluous humidities on particular parts, as in the strangles, all glandular disorders, and old running sores. Four horns full should be given twice or thrice a day, and continued two or three months in obstinate cases, intermitting now and then a week, that the horse may not be cloyed with continual drenching.

When horses take drinks with great reluctance, powders must be given in their feeds; thus crude antimony, or liver of antimony, finely powdered, may

may be given to the quantity of half an ounce, night and morning: but in all surfeits gum guaiacum mixed with antimony is found more efficacious. Thus,

TAKE of crude antimony finely powdered, or where it can be afforded, cinnabar of antimony, and gum of guaiacum, each a pound: mix together with an oily pestle to prevent the gum's caking; divide the whole into thirty two doses, viz. an ounce each dose; let one be given every day in the evening feed.

The
alterative
powders.

Or,

TAKE of cinnabar of antimony, gum guaiacum and Castile or Venice soap, of each half a pound, salt of tartar four ounces; beat them up into a mass, and give an ounce every day.

An alterative ball.

These are excellent alterative medicines, particularly for surfeited horses; they will rectify the fluids,

How they operate. open the horse's hide, promote the secretions, and make him coat well; they will likewise fuse and thin the blood, and therefore are extremely proper when the juices are too viscid and lizy, which often occasions lameness in various parts; in short these sort of medicines are to be preferred to most others of this kind, as they are given with greater safety, and require no confinement, or particular diet.

Are proper for running horses. They seem well calculated also for running horses (especially the latter) whose fluids of course, from the violence of their exercise, are often subject to great alterations; which will with more safety, and less inconvenience, be remedied by these means, and a gentle alterative purge given once a week or ten days, than the usual method of treating them with stronger purgatives; which, besides disqualifying them for their exercise for some time, will not alone answer this intention, till the blood has been saturated with medicines of this kind.

Æthiops

Æthiops mineral, given to the Æthiops quantity of half an ounce a day, is a ^{mineral} very good sweetner and corrector of ^{apt to salivate some} the blood and juices; but it has been ^{horses.} observed, after having been taken a week or ten days, to make some horses flabber, and unable to chew their hay and oats: and the same symptoms have arose, where only two drams of crude mercury has been given, and continued about the same space of time:

e Whenever therefore mercurial pre-^{The cause} parations are given to horses, they should be well attended to, and sufficient intervals be allowed to prevent a flux on the mouth and nose. The reason why these kind of mercurials will flux horses sooner than men, may be owing to the mouths of the lacteals in horses being more open, large and free than those in men; whose orifices may also be furred up by viscid oily things, to which inconveniences horses are not so liable, by reason of their simple diet: besides the horizontal situation of the guts of horses may contribute

contribute not a little to it, by preventing the mercury from passing through them so quick as in men; and the depending situation of the horse's head, may occasion its being so soon affected, when the blood is once saturated with mercurial particles.

*Impediment
to the
salivation
in horses.*

BUT, as it has been found impracticable to carry a horse through a salivation, or even to keep him one week under it, by reason of the great plenitude or fullness brought on all the vessels of the head, so that the horse can neither chew his food, nor swallow liquids, whenever such symptoms appear, the medicine must be laid aside, till by purging, as before mentioned, they are removed.

The following mercurial alterative ball may be given under the above restrictions, in obstinate cases.

*An alterative
mercurial ball.*

TAKE crude mercury one ounce,
Venice turpentine three drams;
rub them together in a mortar,
till the quicksilver is thoroughly
divided,

divided, and then add gum of guaiacum finely powdered two ounces, diagrydium in powder half an ounce: mix with honey, and divide into eight balls: give one every other night for a month, or longer. During this course, care should be taken that the horse gets no cold, for which it is best prosecuted in summer.

As may also the following antimonials in the like cases:

TAKE of the glass of antimony finely powdered two ounces, crocus metallorum finely powdered four ounces, Venice soap six ounces; make into twelve balls with honey, and give one every night.

The great inconveniencies that attend the purging of horses in the usual manner, makes the following method of giving those kinds of medicines more eligible in most cases; for though their operation by the bowels is thereby greatly lessened, yet the other secretions

Purging medicines given in small quantities, are also good alteratives.

are

are more advantageously increased; for by giving them in small quantities, or combined with alteratives adapted to the case, they pass into the blood, and (as has before been explained) act more powerfully, by breaking the cohesions of the viscid fluids, cleansing the finer vessels, where probably obstructions are formed, than when they act more sensibly on the bowels.

Thus in surfeits, flying lamenesses, &c.

Forms
of such
medicines

TAKE aloes six drams; gum guaiacum half an ounce; diaphoretic antimony, and salt of tartar, each two drams; make into a ball with any syrup.

Or six drams of aloes, with half an ounce of diapente, and salt of tartar, may be given as an alterative purge in molten-grease, &c.

Coloquintida and salt of tartar may be given in the same manner: and for obstructions in the lungs, and to thick-

thick-winded horses, take the following :

Galbanum, ammoniacum, and assa foetida, of each two drams ; fine aloes half an ounce or six drams ; saffron one dram ; honey a sufficient quantity.

But, as we have already occasionally offered various forms of this kind, we shall avoid giving here any more specimens.

A decoction of log-wood, prepared like that of guaiacum, is also successfully given in surfeits. Forms of diet drinks.

Lime-water, prepared with shavings of sassaphras and liquorice, is a good diet drink, to sweeten and correct a horse's blood ; and may be given with the nitre balls for that purpose.

Tar-water also, as has before been hinted, may in many cases be well worth trial : but let it be remembered that all medicines of this kind should be continued a considerable time.

Of HUMOURS.

C H A P. XXII.

Of HUMOURS.

The term
humours
but little
under-
stood.

THE word *Humours* (which has an unbounded latitude both in *physick* and *farriery*, and is too often a proper sanctuary for the ignorant to fly to in both professions) seems to be strangely misapplied, and in general but little understood; otherwise it would not be so indeterminately used as it is, when the disorder is not in the fluids, but merely in the vessels.

Very im-
properly
said some-
times to
fall down.

Thus it is often affirmed, that *humours* fall down on the limbs, when with more propriety it might be said, they cannot so well rise up, or circulate so freely in perpendicular as in diagonal canals; for the force of the heart is the same, whither to raise a column of blood in an upright or horizontal direction, though it is not the same in respect to the situation of the vessels; for when any animal is erect, the blood vessels in the legs are more

more on a stretch by far than when he lies down; and if the vessels are in a lax state naturally, or relaxed by external injuries, they are not able to propel the fluids forward, and hence from a retarded circulation arises a swelling in the part affected.

Swellings in the legs often owing to relaxed vessels.

Dr. *Bracken* (to whom all true lovers of horses are much indebted, for the pains he has taken to explode false notions, and embellish true ones) has endeavoured to set this matter in the clearest light; which indeed he has done to the satisfaction of the unprejudiced, and of every one who can understand, and does not wilfully shut his eyes on so clear a doctrine.

It would be to little purpose therefore to inforce it, unless the reader would be at the pains to form to himself a clear idea of the blood's circulation, and consider the solids as composed of elastic fibres, or springy threads, which are sometimes in a lax or loose state, and at others in a tight or firm one.

The study of anatomy absolutely necessary.

D d 2

This

This knowledge would soon convince him, that the extream parts may be swelled, without humours falling down upon them, from a difficulty in the circulation (as before explained) to push on blood in perpendicular columns, or from a laxity of the vessels themselves.

The
falling
down of
humours
explained
by a fami-
liar case.

In order to make this doctrine as familiar as possible, let us suppose that a man, or horse, in perfect health, whose blood and juices are in the best condition, receives a violent blow on the leg, the consequence of which is a bruise, and swelling: if the limb of either is kept in a perpendicular situation, with little or no motion, the swelling will continue; and we may say, if we please, the *humours* are fallen into it: but change only the position, and continue the limb of either in a supine or level one; the swelling will then soon abate, and the *humours* disappear. In this case where were the *humours* before the accident; how came they

so suddenly to the injured limb, and so soon to disappear? Is it not more reasonable to suppose the swelling arose from a retarded circulation in the part injured, the vessels by the violence of the blow having lost their tone, and were so preternaturally distended by the stagnant blood, that a free circulation through the part was thereby interrupted; and that this swelling would have continued, had not the obstruction been removed by a different posture, assisted by proper applications? And is it not obvious in dropical, and other swellings, in the extream parts, from lax fibres, that though the legs shall be enormously swelled, after having been in an erect posture all the day; yet that after laying twelve hours in a supine one, they shall recover their natural shape?

Swellings accounted for from a retarded circulation.

Exemplified in dropical habits.

This is by no means intended to prove, that there are no bad humours, or juices, in the blood, or that they do not attend and affect some particular parts; (daily experience would con-

The blood and juices often vitiated.

tradict

traſſit ſuch an aſſertion, particularly in cancerous, ſchrophulous, venereal, and ſcorbutic caſes in the human body, and the farcy, ſurfeits, ſtrangles, &c. in horſes) but only to guard againſt the promiſcuous uſe of the term, and to evince that in many caſes where the humours are ſaid to abound, and cauſe ſwellings, the fault is in the veſſels, which have not force enough to propel the circulating fluids, or a perpendicular column of blood; as often happens to the veſſels of the legs and extream parts.

Limbs
may be
ſwelled
without
humours.

Thus we ſee that a languid circulation, relaxed veſſels, and want of muſcular power to push on the fluids, may by retarding the circulation, occaſion ſwellings in the extream parts, without any ſuſpicion of bad humours, or the blood's being at all in fault. This might be farther illuſtrated by thoſe ſwellings in man, called the piles, where the aſcent of the venal blood is interrupted by its own weight, the want of force in the veſſels, and of aſſiſtance from the circumjacent parts

parts to push on the circulation: but we hope what has already been said, will sufficiently answer our design.

The inference to be drawn from hence is, that the cure must be differently directed when the swelling proceeds from the blood and juices, and when from the solids or vessels. In the former case, evacuations and alteratives are necessary to lessen their quantity, and rectify their quality; in the latter, externals, proper exercise, and good diet.

Conformably swelled legs arising from poverty of blood, laxity of vessels, and low diet, would be increased by evacuations, and cured by recruiting the constitution. But swelled legs from a gross constitution, where the vessels are too replete, and the blood in bad condition, will seldom be cured without bleeding, purging, rowelling, and alteratives: unless perhaps the horse is turned out to grass.

To

The word
humours
is generally
misunder-
stood by
farriers.

To treat this subject properly, and prove in a strict sense what ought to be understood by the word *Humour*, would take up more time than the brevity we have prescribed ourselves will admit of; but these hints may be sufficient to expose the absurd custom of farriers, who are eternally misapplying a term they by no means understand, and making the word *Humours* subservient to all purposes.

C H A P. XXIII.

Of ROWELLING.

Rowel-
ling de-
fined.

THERE seems to be no remedy so much made use of, and so little understood by farriers in general, as rowels; for which reason we shall endeavour to set the whole affair in a clearer light, than hitherto it has appeared in.

We shall begin then by describing rowelling, which is an artificial vent
made

made between the skin and flesh, in order to unload and empty the vessels in general, and thereby relieve particular parts when too much oppressed by a fullness or redundancy.

The general and absurd reasoning of farriers on the effects and use of rowelling, in some measure makes this chapter the more necessary, as it is too notorious how impertinently they talk on this subject: for in short with them, a rowel is to draw off all the bad and corrupt humours from the blood, by a sort of magick.

The general notion concerning rowels absurd.

It is necessary to observe that the matter discharged by a rowel is nothing more than an ouzing from the extremities of the vessels divided in the making it; in fact then, it is blood, which loses its colour, by being shed out of the vessels, the warmth of the part, and its confinement.

If this is granted, it will evidently appear, that the good effects ensuing this operation, must be owing to a gradual depletion, or emptying of the vessels

The use of rowels.

E e

vessels

vessels in general; by which means the surcharge or load on a particular part is taken off and removed; and impurities or bad juices (generally called humours) run off with the good in proportion to their quantity in the blood.

To imagine *particular humours* are thus separately and alone discharged from the blood through these orifices, is an opinion but too generally received, though a very absurd one; and must be very pernicious in its consequences, from the bad effects it may have in practice; as must the same reasoning also in regard to purging.

Rowels,
when im-
proper.

Thus to lean hide-bound horses, and those of a dry hot constitution, the discharge, by depriving the constitution of so much blood and fluids, is daily exhausting the strength of the animal; and may be productive of bad consequences, by defrauding the constitution of a necessary fluid.

When
proper.

But in disorders from fullness, attended with acrimony or sharpness of the

Of Strains in Various Parts. 211

the juices, and with defluxions on the eyes, lungs, or any part of consequence; the gradual discharge brought on by this means will contribute to lessen the fullness on the parts affected, and give the vessels an opportunity of recovering their tone, while evacuating and alterative medicines are doing their office.

These observations, with some few interspersed in the preceeding chapters, it is hoped, will be of some use to reconcile a very vague term to some meaning.

C H A P. XXIV.

Of Strains in Various Parts.

IT is necessary to observe that in all Strains described. strains, the muscular or tendinous fibres are overstretched; and sometimes ruptured, or broke. To form therefore a true idea of these disorders, let us first consider every muscle and tendon as composed of springy elastic

E e 2 fibres,

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fibres, which have a proper power of their own to contract and extend themselves: or, to make their action more familiar, let us compare them to a piece of catgut, that we may the better judge with what propriety oily medicines are directed for their cure. Thus then, if by a violent extension of this catgut, you had so overstretched it, as to destroy its springiness or elasticity, and was inclined to recover this lost tone; would you for that purpose think of soaking it in oil? And is not the method of treating strains, or overstretched muscles and tendons, full as preposterous, when you bathe or soak them in oily medicines, at a time that they want restringents to brace them up? Yet custom has so established this practice, and fallacious experience seemingly so confirmed it, that it would be a difficult task to convince of its absurdity, the illiterate and prejudiced, who, by attributing effects to wrong causes, are led into this error; and the oils usurp the reputation that is due only to rest and quiet: they seem however to be aware of

Oily
medicines
improper
for strains.

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of the ill consequences, by their adding the hot oils, as spike, turpentine and origanum ; which, though they in some measure guard against the too suppleing quality of the other oils ; yet the treatment is still too relaxing to be of real service.

And indeed in all *violent* strains of either tendons or muscles, whatever opinion we may entertain of bathing and anointing with favourite nostrums, which often succeed in slight cases, where perhaps bandage alone would have done ; yet it is the latter, with proper resting the relaxed fibres, till they have thoroughly recovered their tone, that are the chief things to be depended on ; and frequently some months are necessary for effecting the cure.

All violent strains of the ligaments, which connect the bones together, especially those of the thigh, require time and turning out to grass, to perfect a recovery. External applications can avail but little here, the parts affected laying too deep, and so surrounded with muscles, that medicines cannot

Bandage
and rest
proper in
strains.

Time and
turning
to grass,
often ne-
cessary.

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cannot penetrate to them. The sooner in these cases a horse is turned out to graze the better, as the gentle motion in the field will prevent the ligaments and joint oil from thickening, and of course the joint itself from growing stiff; nor do I believe that firing, so commonly practised in this case, is of half the consequence (if of any at all) as rest, and turning out for a considerable time; which by the bye is always advised at the same time the horse is fired. I could not avoid saying thus much, in order to shew the great advantages of rest in all strains, and that no horse should be worked till he is thoroughly recovered.

The
signs of a
strained
shoulder.

When a horse's shoulder is overstrained (for there is no such thing as being shoulder-slipt or dislocated) he does not put out that shoulder as the other, but to prevent pain, sets the sound foot hardily to the ground, to save the other; even though he be turned short on the lame side, which motion tries him the most of any. In order to cure this lameness, first bleed him,

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him, and let the whole shoulder be well bathed three times a day with hot verjuice or vinegar, in which may be dissolved a piece of soap; but if the lameness continues without swelling, or inflammation, after resting two or three days, let the muscles be well rubbed with good opodeldoch, or either of the following:

TAKE camphorated spirits of wine Mixtures
two ounces, oil of turpentine for strains.
one ounce; this proportion will
prevent the hair coming off.

Or,

TAKE the best vinegar half a pint,
spirit of vitriol, and camphorated
spirit of wine, of each two ounces.

When the shoulder is very much A fomentation.
swelled, it should be fomented with
woollen cloths (large enough to cover
the whole) wrung out of hot verjuice
and spirit of wine; or a fomentation
prepared with a strong decoction of
wormwood, bay-leaves, and rosemary,
to a quart of which may be added
half a pint of spirit of wine.

A rowel

Boring
and peg-
ging con-
demned.

A rowel in the point of the shoulder in this case often does great service; especially if the strain has been very violent, and the swelling very large; but as to boring up the shoulder with a hot iron, and afterwards inflating it, it is both a cruel and absurd treatment; and the pegging up the sound foot, or setting on a patten shoe, to bring the lame shoulder on a stretch, is a most preposterous practice, and directly calculated to render a horse incurably lame; for it can only be necessary in cases the very opposite to this, where the muscles have been long contracted, and we want to stretch them out.

Refrin-
gent poul-
tices very
proper in
strains.

Where poultices can be applied, they are at first undoubtedly very effectual, after bathing with hot vinegar or verjuice, and are to be preferred greatly to cold charges, which by drying so soon on the part, keeps it stiff and uneasy; let them be prepared with oatmeal, rye-flower, or bran boiled up in vinegar, strong beer, or red wine lees, with lard enough to prevent their

their growing stiff: and when by these means the inflammation and swelling is brought down, bathè the part twice a day with either of the above mixtures, opodeldoch, or camphorated spirits of wine; and rowl the part three or four inches, both above and below, with a strong linnen rowler, of about two fingers width; which will contribute not a little to the recovery, by bracing up the relaxed tendon; and perhaps is more to be depended on than the applications themselves.

Bandage
advised.

In strains of the *coffin joint* that have not been discovered in time, there will grow such a stiffness in the joint, that the horse will only touch the ground with his toe; and the joint cannot be played with the hand; the only method here is repeated blistering, and then firing superficially.

Signs of
strains in
the coffin.

Strains of the *back sinews* are very common, and are easily discovered by the swelling, which extends sometimes from the back side of the knee down

Strains in
the back
sinews,
how
known
and cured.

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in the heel, but for the most part the hurt is in the leg before the other. The region should be well bathed three or four times a day with hot vinegar; and if much swelled, apply the poultices above recommended; and when the swelling is down, bathe with the mixtures above, or with camphorated spirit of wine and oil of sweetgum, in which is dissolved as much camphor as the spirits will take up, and rub on the tendon with a proper liniment. Curriers shavings wetted with vinegar have been found useful for this purpose; as has also tar and spirit of wine: but where the tendon has suffered by repeated injuries of this kind the case will demand blistering, sitting, and proper rest.

Strains of the tendons and passers Strains of the *tendons* and *passers* arise frequently from kicks, or blows; if they are much swelled, apply first the poultices: and when the swelling is abated, bathe with the above, or the following:

A mixture for the tendons. TAKE vinegar one pint; camphorated spirits of wine, four ounces; white

Of Strains in Various Parts. 219

white vitriol, dissolved in a little water, two drams.

As great weakness remains in the pasterns after violent strains, the best method is to turn the horse out to grass till he is perfectly recovered; when this cannot be complied with, the general way is to blister and fire.

When a horse is lame in the *hifle*, The signs of lameness in the *hifle*. he generally treads on his toe, and cannot set the heel to the ground. Treat him at first with the vinegar and cooling restringents; but if a large swelling with puffyness ensues, foment it well with the discutient fomentation till it disperses; and then bathe the part with any of the above medicines.

A lameness in the whirle bone and hip, is discovered by the horse's dragging his leg after him, and dropping backward on his heel when he trots. The signs of lameness in the whirle bone. If the muscles of the hip are only injured, this kind of lameness is cured easily; but when the ligaments of the joint are affected, the cure is often

F f 2 very

very difficult, tedious, and uncertain. In either case at first bathe the parts well with the cooling medicines four or five times a day; in the muscular strain this method alone may succeed, but in the ligamentous it is rest and time only can restore the injured parts to their proper tone.

Strains in
the hock.

Strains in the *hock* are to be treated by soaking the parts with coolers and repellers; but when the ligaments are hurt, and they are attended with great weakness and pain, use the fomentation. If a hardness should remain on the outside, it may be removed by repeated blistering; if within, it may be out of the power of any external applications to remove; however the joint should be fired gently with small razes or lines pretty close together, and then covered with a mercurial plaister. To the discutient fomentation above-mentioned may be added crude sal armoniac, with a handful of wood ashes boiled in it.

The blistering ointment for the above purposes may be found in the
chapter

Of Strains in Various Parts. 221

chapter of *Bone-Spavin*; but the sub-
limate should be omitted.

The *firing* used for the strengthening relaxed sinews or tendons, should act Firing for strains on the sinews how it should be performed only on the skin, which, by contracting and hardening it all round the sinews, compresses them more firmly like a bandage. The bow-men of old submitted to this operation, in order to give strength to the muscles and tendons of their arms. A proper degree of skill is very requisite to perform it effectually on a horse; for a due medium should be observed, and the instrument neither so slightly applied as to scarify the skin only superficially, nor so deep as to wound or cauterize the sinew or its sheath: in the former case, the wounds not penetrating the skin at all, the scars would not be hard enough to act with a sufficient pressure on the tendon; and in the latter, the fire being given too deep, might slough off the tendon itself, the consequence of which would be a loss of substance, and of course a lameness would ensue from a contracted sinew.

CHAP.

C H A P. XXV.

Of TUMORS *and*
IMPOSTUMES.

TUMORS or swellings arise either from external injuries or internal causes.

Swellings
from ex-
ternal
causes,
how
treated.

Swellings caused by external accidents, as blows and bruises, should at first be treated with restringents; thus let the part be bathed frequently with hot vinegar or verjuice, and, where it will admit of bandage, let a flannel wetted with the same be rowled on: If by this method the swelling does not subside, apply, especially on the legs, the poultice with red wine lees, strong beer grounds and oatmeal, or with vinegar, oil and oatmeal; either of these may be continued twice a day, after bathing, till the swelling abates; when in order to disperse it intirely, the vinegar should be changed for camphorated spirit of wine, to four ounces of which may be added
one

IMPOSTUMES.

123

one of spirit of sal ammoniac; or it may be bathed with a mixture of two ounces of crude sal ammoniac boiled in a quart of chamberlye, twice a day, and rags dipped in the same may be rowled on.

Fomentations made by boiling wormwood, bay-leaves and rosemary, and adding a proper quantity of spirits, are often of great service to thin the juices, and fit them for transpiration; especially if the injury has affected the joints.

Fomentations often necessary.

But in bruises, where the extravasated blood will not by these means be dispersed, the shortest way is to open the skin, and let out the grumes.

Critical tumors, or swellings which terminate fevers, should by no means be dispersed; except when they fall on the pastern or coffin joint, so as to indanger them; in this case the discutient fomentation should be applied three or four times a day, and a cloth or flannel frequently wrung out of the same should be bound on, in order

to keep the joint continually breathing.

Critical
swellings
should be
brought to
matter.

But if the swelling fixes under the jaws, behind the ears, on the poll withers, or in the groins and sheath, &c. it should be encouraged and forwarded by ripening poultices, wherever they can be applied; oatmeal boiled soft in milk, to which a proper quantity of oil or lard is added, may answer this purpose; or the poultice recommended in the chapter of *Strangles*: these must be applied twice a day, till the matter is perceived to fluctuate under the fingers, when it ought to be let out; for which purpose let the tumor be opened with a knife or strong lancet, the whole length of the swelling, if it can be done safely, for nothing contributes so much to a kind healing, as the matter's having a free discharge, and the openings being big enough to dress to the bottom.

The sore,
how dressed.

Pledgits of tow spread with black or yellow basilicon (or the wound ointment

ointment) and dipped in the same, melted down with a fifth part of oil of turpentine, should be applied to the bottom of the sore, and filled up lightly with the same, without cramming; it may be thus dressed once or twice a day, if the discharge is great, till a proper digestion is procured, when it should be changed for pledgits spread with the red precipitate ointment, applied in the same manner.

Should the sore not digest kindly, but run a thin water and look pale, foment as often as you dress, with the above fomentation; and apply over your dressing the strong beer poultice, and continue this method till the matter grows thick, and the sore florid.

Fomentations and poultices recommended to help digestion.

The following ointments will generally answer your expectations in all common cases, and may be prepared without, as well as with, the verdigrase.

TAKE Venice turpentine and bees wax, of each a pound; oil of olives one pound and half; yellow

The wound ointment.

G g

rosin

rosin twelve ounces: when melted together, two or three ounces of verdigrease finely powdered may be stirred in, and kept so till cold, to prevent its subsiding.

The red
precipitate
ointment.

TAKE of yellow basilicon, or the above ointment, without verdigrease, four ounces; red precipitate finely powdered half an ounce: mix them together cold, with a knife or spatula.

This last, applied early, will prevent a fungus, or proud flesh, from shooting out; for if you dress too long with the above digestive, the fungus will rise fast, and give some trouble to suppress it; when it will be necessary to wash the sore as often as you dress, with a solution of blue vitriol in water, or to sprinkle it with burnt allum and precipitate. If these should not be powerful enough, touch with a caustic, or wash with the sublimate water, made by dissolving half an ounce of corrosive sublimate in a pint of lime water.

The sub-
limate
wash.

But

But this trouble may in a great ^{Observa-} measure be prevented, if the sore is on a part where bandage can be applied with compresses of linnen cloth: for even when these excrescences re-germinate, as it were, under the knife, and spring up in spite of the caustics above mentioned, they are to be subdued by moderate compression made on the sprouting fibres, by these means.

Authors on farriery have in general given very proper receipts to answer every intention of this kind by medicines; but as they have not, I think, laid down sufficient rules for their application in those cases where they are most wanted, I hope the following general directions will not be unacceptable; as the difficulty in healing some kind of sores arises frequently from the unskilful manner of dressing them.

It may be necessary then to observe ^{How sores} here once for all, that the cures of ^{should be} most sores are effected by the simplest ^{dressed.} methods, and that it is often of much

consequence is known to be
 a fore that man to die is wish, and
 it is the credit indeed the chief art of
 this branch of surgery; for the most
 eminent in that profession have long
 since discovered, that variety of oint-
 ments and salves are unnecessary in
 the cure of most wounds and sores,
 and they have accordingly discarded
 the greatest part, formerly in repute
 for that purpose; repeated observa-
 tions having taught them, that after
 the rejection of matter is generally dis-
 covered to heal up the wound fast
 enough to itself, and that the Surgeon's
 chief care is to prevent a luxuriance,
 commonly called *gross flesh*; which
 is commonly wherein lard or oil
 is used, and is prone to encourage,
 and to make the fibres too lax and
 loose, and which dry lint alone,
 as is used, is easily prevents, by
 its drying quality, and light com-
 pression, the prouting fibres.

When a new wound or sore is
 made, the dressings
 are hard, the tender shoots
 of

of flesh from the bottom are prevented pushing up; and the sides of the sore in time from this distension may grow horny, and turn fistulous; nor has the matter by this method a free discharge.

On the other hand, if sores of any depth are dressed superficially, the external parts being more disposed to heal and come together than the internal, they will fall into contact, or heal to soon; and the sore not filling up properly from the bottom, will break out a-fresh.

Hence we may justly conceive how little stress is to be laid on famous ointments, or family salves, unskilfully applied; for unless this due medium is observed, or obtained in the dressing, no hollow sore can heal up properly.

I thought it necessary to be a little explicit on this head, as gentlemen so frequently complain of being disappointed in their cures, notwithstanding the excellency of their ointment, or balsam; and to convince them

Frequent
disap-
point-
ments
happen
from dress-
ing un-
skilfully.

them that less confidence should be put in these favourite medicines than is generally imagined; for where the habit is sound, and the blood and juices in good condition, there are few simple dressings that will not succeed; and when otherwise, the most pompous will not avail, till these are rectified by proper internal medicines.

The signs
of good
digestion.

As soon then as a good digestion is procured (which is known by the thickness and whiteness of the matter discharged, and the florid red colour at the bottom of the sore) let the dressings be changed for the precipitate medicine; or the sore may be filled up with dry lint alone, or dipped in lime-water, with a little honey and tincture of myrrh, or brandy; about a fifth part of the latter to one of the former; a pledgit of lint dipped in this mixture should also be applied to the bottom of the sore, which should be filled up with others to the surface or edges, but not crammed in too hard, as before observed, nor yet applied too loosely.

By

By this method, the sore would incarn, or heal up properly, and soft spongy flesh would be prevented, or suppressed in time; whereas when ointments or salves are too long continued, a fungus, or proud flesh, is thereby so encouraged in its growth, that it requires some time to destroy and eat it down again: a proper compress of cloth, and a linnen rowler is absolutely necessary both for this purpose, and to secure on the dressings, wherever they can conveniently be applied.

Digestive ointments should not be continued too long.

To illustrate what has been said, I shall take this opportunity of shewing how a wound from an over-reach should be treated, as I find it sometimes proves very difficult of cure. This wound is caused by the point of the hind shoe's cutting into the horse's fore-heel; and when it is only superficial, or slight, is generally easily cured by washing it clean, and applying the wound ointment: but it should be observed from the nature and manner

An over-reach described.

manner of the injury, where the blow has been smart, that it differs widely from a common cut; the part here being both torn and bruised; and consequently it requires to be properly digested, in order to lay a good foundation for healing.

How
cured.

For this purpose, after washing out any dirt or gravel with soap-suds, &c. let the wound be digested, by dressing it with dossils of lint dipped in an ounce of Venice turpentine, divided with the yolk of an egg, to which half an ounce of tincture of myrrh may be added; over this dressing I should advise the turnep poultice, or that with strong beer grounds and oatmeal, to be applied, three or four times, or oftner, till the digestion is procured, which is known by the signs above mentioned, and then both these dressings may be changed for the precipitate medicines, or the lime-water mixture; observing always to apply the dossils carefully to the bottom, to fill up the sore with the same even to the surface, and to bind all

all on with a compress and rowler :
and if any cavities appear that cannot
conveniently be dressed to the bottom,
they should always be laid open, or
no proper foundation for healing can
be obtained.

CHAPTER XXVI.

Of WOUNDS in General.

IN all fresh wounds made by cutting
instruments, there is nothing more
required than bringing the lips of the
wound into contact by suture or ban-
dage, provided the part will allow of
it; for on wounds of the hips, or other
prominent parts, and across some of
the large muscles, the stitches are apt
to burst on the horse's lying down
and rising up in the stall; in such cases
the lips should not be brought close
together: one stitch is sufficient for a
wound two inches long; but in large
wounds, they should be at an inch or
more distance; and if the wound is

The lips
of all fresh
wounds
should be
brought
into con-
tact.

H h

deep

deep in the muscles, care should be taken to pass the needles proportionably deep, otherwise the wound will not unite properly from the bottom.

Now
bleeding
in wounds
should be
stopped.

Should the wound bleed much from an artery divided, the first step should be to secure that by passing a crooked needle underneath, and tying it up with a waxed thread: if the artery cannot be got at this way, apply a button of lint or tow to the mouth of the bleeding vessel, dipped in a strong solution of blue vitriol, styptic water, oil of vitriol, or hot oil of turpentine, powdered vitriol, or colcothar, &c. and remember always to apply it close to the mouth of the bleeding vessels, and take care that it is kept there by proper compress and bandage, till an eschar is formed; otherwise it will elude your expectations, and frequently alarm you with fresh bleedings.

I purposely avoid setting down any famous receipts for fresh wounds, whether ointments or Fryar's balsams, being well assured, that in a healthy
sound

sound constitution, nature furnishes the best balsam, and performs herself the cure, which is so often attributed to the medicine; when it is otherwise, and the blood is deprived of its balsamic state, as will appear from the aspect of the wound and its manner of healing; it must be rectified by proper internal medicines, before a good foundation for healing can be laid by any external applications whatever.

The blood
the best
balsam,
when in
good con-
dition.

The lips of the wound then being brought together by the needle or bandage, it needs only be covered with rags dipped in brandy, or a pledgit of tow spread with the wound ointment, the directions in the preceeding chapters being observed, and the wounded part kept as much as possible from motion.

Fresh
wounds
how dress-
ed.

Remember to dress all wounds of the joints, tendons, and membranous parts, with terebinthinate medicines; to which may be added honey and tincture of myrrh; and avoid all greasy applications whatever; fomentations are also generally here of great use.

Observa-
tion.

First-kind ~~wounds~~ ~~any other accidents~~ ~~should be treated~~ ~~in the same manner~~; applying the ~~best~~ ~~of bread and milk porridge~~ over the dressing, till some signs of digestion appear; and fomenting the part well every day. This method is also very successfully used to those swellings which often arise on the neck from bleeding, the fires being sprinkled with precipitate and burnt allum powdered, to fetch out the core or fungus which chokes up the orifice. The usual method is to introduce a piece of vitriol or sublimate, which often brings on a plentiful discharge, fetches out the core, and makes a cure: but it is often with the loss of the vein, and it sometimes leaves a large swelling and impostumation.

Gun-shot ~~wounds~~ ~~how treat~~ ~~ed~~. In gun-shot wounds, when the ball has not penetrated too deep, it should be extracted, if it can be fetched away without disturbance, together with any extraneous bodies that might pass in with it; the wound

wound should be dressed with the old digestive of Venice or common turpentine, divided with the yolks of eggs, to which may be added some honey and tincture of myrrh. The entrance of these wounds frequently requires to be enlarged, and a depending orifice should always be procured, if possible; and if the wound should not digest kindly, apply the beer poultice, and foment with the discutient fomentation.

In scalds, or burns from gunpowder, or any other cause, when the skin remains intire, bathe the part well, and keep it soaked with rags dipped in spirit of wine camphorated: salt bound thick on the part has been found very effectual for this purpose: and indeed all saline and spirituous applications excel others while the skin is yet unbroke; but when the skin is separated, anoint the part, and keep it constantly supple with linseed or sallad oil, and a plaister spread with bees-wax and oil; if the skin is so scorched, that sloughs must

Scalds and
burns,
how treat-
ed.

be

be digested out, dress with the wound ointment and oil of turpentine, and finish the cure with any drying ointment. Should the horse be feverish from the pain, bleed him, give cooling glysters, and treat him as we have directed in simple fevers.

Obser-
vation.

The fire supposed to be left in the part after injuries of this kind, is nothing more than the inflammation, which is the natural effect of such causes; so that the whimsical notions and conceits concerning fire remaining in the burnt part, is extremely absurd.

C H A P. XXVII.

Of ULCERS in General.

WE shall not here enter into a description of each particular species of ulcers, but only lay down some directions for their general treatment; by which means we shall avoid the

the usual prolixity of authors on this subject, and yet give so general an idea of the nature of ulcers, as we hope will be sufficiently instructive both of the application, and of the proper remedy to each.

It may be necessary to observe, that we may often in vain pursue the best methods of cure by external applications, unless we have recourse to proper internal remedies; for as all ulcers difficult to heal proceed from a particular indisposition of the blood and juices, before the former can be brought into any order, the latter must be corrected by alteratives and sweetening medicines.

The cure of some ulcers in vain attempted without internals.

The first intention in the cure of ulcers is bringing them to digest, or discharge a thick matter; which will in general be effected by the green ointment, or that with precipitate; but should the fore not digest kindly by these means, but discharge a gleety thin matter, and look pale, you must then have recourse to warmer dressings,

The general method of curing ulcers.

such

with a balsam or oil of turpentine, washed down with your common digestive, and the strong-beer poultice sent them; it is proper also in these kind of ulcers where the circulation is languid, and the natural heat abated, to warm the part, and quicken the motion of the blood, by fomenting it well at the time of dressing; which method will thicken the matter, and raise the native heat of the part, and then the former dressings may be repeated.

Callosities
arise.

If the fleshy of the ulcer grow hard or callous, they must be pared down with a knife, and afterwards rubbed with the caustic.

Ulcers
with
pusse
flesh.

Where soft fungous flesh begins to rise, it should carefully be suppressed in time, otherwise the cure will go on but slowly; if it has already sprouted above the surface, pare it down with a knife, and rub the remainder with a bit of caustic; and to prevent its rising again, sprinkle the sore with equal parts of burnt allum and red precipitate,

ing, which is of a sharp and caustic nature, is recommended on Mr. Gibson's experience.

A drying
injection.

TAKE of Roman vitriol half an ounce, dissolve in a pint of water, then decant and pour off gently into a large quart bottle; add half a pint of camphorated spirit of wine, the same quantity of the best vinegar, and two ounces of Ægyptiacum.

This mixture is also very successfully applied to ulcerated greasy heels, which it will both cleanse and dry up.

Fistulous
ulcers.

These sinusses or cavities frequently degenerate into *fistula*, that is, grow pipey, having the inside thickened, and lined as it were with a horny calous substance. In order to their cure, they must be laid open, and the hard substance all cut away; where this is impracticable, scarify them well and trust to the precipitate medicine made strong, rubbing now and then with caustic, butter of antimony, or equal parts of quicksilver and aqua fortis.

When

Of ULCERS.

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When a rotten or foul bone is an attendant on an ulcer, the flesh is generally loose and flabby; the discharge oily, thin and stinking, and the bone discovered to be carious, by its feeling rough to the probe passed through the flesh for that purpose. In order to a cure, the bone must be laid bare; that the rotten part of it may be removed; for which purpose, destroy the loose flesh, and dress with dry lint; or the dossils may be pressed out of tincture of myrrh or euphorbium: the throwing off the scale is generally a work of nature, which is effected in more or less time, and in proportion to the depth the bone is affected; though burning the foul bone is thought by some to hasten its separation.

Ulcers
with foul
bones.

Where the cure does not properly succeed, mercurial physick should be given, and repeated at proper intervals: and to correct and mend the blood and juices, the antimonial and alterative powders, with a decoction of guaiacum and lime waters, are proper for that purpose.

What in-
ternals
proper to
correct the
blood.

C H A P. XXVIII.

Of a BONE-SPAVIN.

A spavin
described.

Without entering at all into the cause of this disorder, which is a bony excreffence, or hard swelling growing on the inside of the hock of a horse's leg, we shall content ourselves with describing the different kinds thereof, by their symptoms; and then enter on their cure.

A spavin that begins on the lower part of the hock, is not so dangerous as that which puts out higher, between the two round processes of the leg bone; and a spavin near the edge is not so bad as that which is more inward towards the middle, as it does not so much affect the bending of the hock.

The differ-
ent kinds

A spavin that comes by a kick or blow, is at first no true spavin, but a bruise on the bone, or membrane which covers it; therefore not of that conse-

consequence, as when it proceeds from a natural cause: and those that put out on colts and young horses, are not so bad as those that happen to horses in their full strength and maturity; but in very old horses they are generally incurable.

The usual method of treating this disorder is by blisters and firing, without any regard to the situation, or cause whence it proceeds. Thus if a fullness on the fore part of the hock comes upon hard riding, or any other violence, which threatens a spavin; in that case such coolers and repellers are proper, as are recommended in strains and bruises. Those happening to colts and young horses are generally superficial, and require only the milder applications; for it is better to wear them down by degrees, than to remove them at once by severe means.

Some
proper
cautions.

Various are the prescriptions for the blistering ointment; but the following, on proper experience, stands well recommended by Mr. *Gibson*.

TAKE

The
blistering
ointment.

TAKE nerve and marshmallow ointment, of each two ounces; quicksilver one ounce; thoroughly broke with an ounce of Venice turpentine; Spanish flies powdered, a dram and a half; sublimate one dram; oil of origanum two drams.

How to be
used.

The hair is to be cut as close as possible, and then the ointment applied pretty thick over the part; this should be done in the morning, and the horse kept tied up all day, without any litter till night; when he may be untied, in order to lie down; and a pitch plaister or any sticking plaister may be laid over it, and bound on with a broad tape or bandage, to keep all close.

After the blister has done running, and the scabs begin to dry and peel off, it may be applied a second time, in the same manner as before; this second application generally taking greater effect than the first, and in colts and young horses makes a perfect cure.

When

When the spavin has been of long standing, it will require to be renewed, perhaps five or six times; but after the second application, a greater distance of time must be allowed, otherwise it might leave a scar, or cause a baldness; to prevent which, once a fortnight or three weeks is often enough; and it may in this manner be continued six or seven times, without the least blemish, and will generally be attended with success.

But the spavins that put out on older or full aged horses, are apt to be more obstinate, as being seated more inward; and when they run among the sinuities of the joint, they are for the most part incurable, as they then lie out of the reach of applications, and are arrived to a degree of impenetrable hardness.

The usual method in these cases is to fire directly, or to use the strongest kind of caustic blisters; and sometimes to fire, and lay the blister immediately over the part; but this way seldom succeeds.

Some cautions in regard to firing and caustics.

succeeds farther than putting a stop to the growth of the spavin, and is apt to leave both a blemish and stiffness behind; besides the great risk run (by the application of these fiery and caustic medicines to the nervous and tendinous parts about the joints) of exciting violent pain and anguish, and destroying the limb.

The
blistering
ointment
recom-
mended.

The best and safest way therefore is to make trial of the blistering ointment above, and to continue it according to the directions there laid down, for some months, if found necessary; the horses in the intervals working moderately: the hardness will thus be dissolved by degrees, and wear away insensibly.

Directi-
ons for
firing.

Where the spavin lies so deep, and runs so far into the hollow of the joint, that no applications can reach it, neither firing nor medicines can avail, for the reasons above mentioned: though bold ignorant fellows have sometimes succeeded in cases of this sort (by men of judgment deemed incurable) by the application of caustic ointments

ointments with sublimate, which act very forcibly, enter deep, and make a large discharge, and by that means destroy a great part of the substance, and dissolve away the remainder.

Though whoever is at all acquainted with the nature of these medicines, must know how dangerous in general their operation is on these occasions, and that a proper prepared cautery made like a fleam, under the direction of a skilful hand, may be applied with less danger of injuring either tendons or ligaments. After the substance of the swelling has been properly penetrated by the instrument, it must be kept running by the precipitate medicine, or mild blistering ointment.

Directions
for
firing.

Where the spavin lies not deep in the joint, and the blistering method will not succeed, the swelling may be safely fired with a thin iron forced pretty deep into the substance, and then should be dressed as is above directed.

C H A P. XXIX.

*Of a CURB and RING-
BONE.*

A curb
described.

AS a spavin rises among the bones on the fore part of the hock, so a curb takes its origin from the junctures of the same bones, and rises on the hind part, forming a pretty large tumor over the back part of the hind leg, attended with stiffness, and sometimes with pain and lameness.

How
cured.

A curb proceeds from the same causes that produce spavins; *viz.* hard-riding, strains, blows, or kicks. The cure at first is generally easy enough effected by blistering, repeated two or three times, or oftner. If it does not submit to this treatment, but grows excessively hard, the quickest and surest way is to fire with a thin iron, making a line down the middle from top to bottom, and drawing several lines in a penniform manner pretty deep; and then to apply a mild blistering

tering plaister or ointment over it:—
This method will intirely remove it.

There is another swelling taken notice of, on the outside of the hock, which is called a *Jardon*. A jardon described. This commonly proceeds from blows and kicks of other horses; but frequently happens to managed horses, by setting them on their haunches: it is seldom attended with much lameness, unless it has been neglected, or some little process of the bone be broke. It should first be treated with coolers and repellers; but if any swelling continues, hard, and insensible, the best way is to blister or fire; but mild blisters alone generally succeed.

The ring-bone is a hard swelling on the lower part of the pastern, which generally reaches half way round the fore part thereof, and from its resemblance to a ring, has its denomination. It often arises from strains, &c. and, when behind, from putting young horses too early upon their haunches; for in that attitude

A ring-bone described.

a horse throws his whole weight as much, if not more, upon his pasterns, than on his hocks.

~~Their
difference~~

When it appears distinctly round the pastern, and does not run downwards towards the coronet, so as to affect the coffin-joint, it is easily cured; but if it takes its origin from some strain or defect in the joint originally, or if a callosity is found under the round ligament that covers that joint, the cure is generally dubious, and sometimes impracticable; as it is apt to turn to a quittor, and in the end to form an ulcer upon the hoof.

The ring-bones that appear on colts and young horses, will often insensibly wear off of themselves, without the help of any application; but when the substance remains, there needs no other remedy besides blistering, unless when by long continuance it is grown to an obstinate hardness, and then it may require both blistering and firing.

To

To fire a ring-bone successfully, let The cure. the operation be performed with a thinner instrument than the common one, and let the lines or razes be made not above a quarter of an inch distant, crossing them obliquely somewhat like a chain: apply a mild blister over all; and when quite dried up, the rupture plaister; and then turn the horse to grafs for some time.

C H A P. XXX.

Of SPLENTS.

THES E are hard excreffences that Splents described. grow on the shank-bone, and are of various shapes and sizes. Some horses are more subject to splents than others; but young horses are most liable to these infirmities, which often wear off, and disappear of themselves. Few horses put out splents after they are seven or eight years old, unless they meet with blows or accidents.

A splent

A splent that arises in the middle of the shank-bone is no ways dangerous; but those that arise on the back part of this bone, when they grow large and press against the back sinew, always cause lameness or stiffness by rubbing against it: the others, except they are situated near the joints, seldom occasion lameness.

Best let
alone, if
they oc-
casion no
lameness.

As to the cure of splents, the best way is not to meddle with them, unless they are so large as to disfigure a horse, or are so situated as to endanger his going lame.

The cure.

Splents in their infancy, and on their first appearance, should be well bathed with vinegar, or old verjuice; which, by strengthening the fibres, often put a stop to their growth: for the membrane covering the bone, and not the bone itself, is here thickened; and in some constitutions purging, and afterwards diuretic drinks, will be a great means to remove the humidity and moisture about the limbs, which
is

is what often gives rise to such ex-
cesses.

Various are the remedies prescribed for this disorder; the usual way is to rub the splent with a round stick, or the handle of a hammer, till it is almost raw, and then touch it with oil of origanum. Others lay on a pitch plaister, with a little sublimate or arsenic, to destroy the substance: some use oil of vitriol; some tincture of cantharides: all which methods have at times succeeded; only they are apt to leave a scar with the loss of hair. Those applications that are of a more caustic nature often do more hurt than good, especially when the splent is grown very hard, as they produce a rottenness, which keeps running several months before the ulcer can be healed, and then leaves an ugly scar.

Mild blisters often repeated, as recommended in the chapter of *Bone-Spavin*, should first be tried as the most eligible method, and will gene- rally

Mild blis-
ters are to
be pre-
ferred to
firing.

rally succeed even beyond expectation: but if they fail, and the splent be near the knee or joints, you must fire and blister in the same manner as for the bone-spavin.

Splents on the back part of the shank-bone are difficult to cure, by reason of the back sinews covering them; the best way is to bore the splent in several places with an iron not very hot; and then to fire in the common way, not making the lines too deep, but very close together.

C H A P. XXXI.

Of the POLL-EVIL.

The
poll-evil
described.

THE poll-evil is an abscess near the poll of a horse, formed in the sinusses between the noll-bone, and the uppermost vertebræ of the neck.

How
cured.

If it proceeds from blows, bruises, or any external violence, at first bathe the swelling often with hot vinegar; and

and if the hair be fretted off, with an ouzing through the skin, make use of two parts of vinegar, and one of spirit of wine; but if there be an itching with heat and inflammation, the safest way is to bleed and apply poultices with bread, milk, and elder flowers: this method, with the assistance of physick, will frequently disperse the swelling, and prevent this evil.

But when the tumor is critical, and has all the signs of matter, the best method then is to forward it by applying the ripening poultices already taken notice of, till it comes to maturity, and burst of itself; or if opened with a knife, great care should be taken to avoid the tendinous ligament that runs along the neck under the mane: when matter is on both sides, the opening must be made on each side, and the ligament remain undivided.

How
treated,
when cri-
tical.

If the matter flows in great quantities, resembles melted glue, and is of an oily consistence, it will require a second incision, especially if any

Various
methods
of cure.

L l

cavities

carries are discovered by the finger or probe; these should be opened by the knife, the orifices made depending, and the wound dressed with the common digestive of turpentine, honey, and tincture of myrrh, and after digestion with the precipitate ointment; or wash the sore with the following made hot, and fill up the cavity with tow soaked in it.

A strong
wash.

TAKE vinegar or spirit of wine half a pint, white vitriol dissolved in spring water half an ounce, tincture of myrrh four ounces.

This may be made sharper by adding more vitriol; but if the flesh is very luxuriant, it should first be pared down with a knife before the application; with this wash alone Mr. *Gibson* has cured this disorder without any other formality of dressing, washing with it twice a day, and laying over the part a quantity of tow soaked in vinegar, and the white of eggs beat together. This last application will serve instead of a bandage, as it will adhere close
to

to the poll, and come off easy when there is occasion to dress. Some wash with the phagædenic water, and then fill up the abscess with loose doffils of tow soaked in *Ægyptiacum* and oil of turpentine made hot, and continue this method till the cure is effected.

But the most compendious method of cure is found by observation to be by scalding, as the farriers term it, and is thus prosecuted when the sore is foul, of a bad disposition, and attended with a profusion of matter.

TAKE corrosive sublimate, verdigrease in fine powder, and Roman vitriol, of each two drams; green copperas half an ounce; honey or *Ægyptiacum* two ounces, oil of turpentine and trail oil, of each eight ounces; rectified spirit of wine four ounces: mix together in a bottle.

The
scalding
mixture.

Some make their scalding mixture milder, using red precipitate instead of the sublimate, and white vitriol instead of the blue; the following has

been successfully used for this purpose, viz. half an ounce of verdigrease, half a pint of train oil, four ounces of oil of turpentine, and two of oil of vitriol.

The method of scalding.

The manner of scalding is first to clean the abscess well with a piece of sponge dipped in vinegar; then put a sufficient quantity of the mixture into a ladle with a spout, and when it is made scalding hot, pour it into the abscess, and close the lips together with one or more stitches. This is to remain in several days, and if good matter appears, and not in an over great quantity, it will do well without any other dressing, but bathing with spirit of wine; if the matter flows in great abundance, and of a thin consistence, it must be scalded again, and repeated till the matter lessens and thickens.

Observation.

These liquid corrosive dressings agree well with horses, whose fibres are stiff and rigid, and whose juices are oily and viscid; in this case they contract the vessels of the tendons on the

the hind part of the head and upper part of the neck, which are continually spewing out a matter or ichor that can hardly be digested, or the profusion abated without such applications as these.

C H A P. XXXII.

Of a Fistula and Bruises on the Withers, Warbles on the Back, and Sit-Fasts.

BRUISES on the withers frequently impostumate, and for want of care turn fistulous; they arise often from pinches of the saddle, and should be treated with repellers; for this purpose bathe the tumor well with hot vinegar three or four times a day, if that does not succeed alone, an ounce of oil of vitriol may be put to a quart of vinegar, or half an ounce of white vitriol dissolved in a little water, and added to the same quantity. These are generally very effectual repellers

Bruises of the withers, how caused.

The cure.

THE FEVERIAL

which is the purpose of fomenting, and
 will frequently prevent suppuration:
 when the swelling is attended
 with heat, itching, and pain, for
 water poultices, the following mixture
 will meet its more proper indication.

To make
 a good

Take two ounces of cream of tartar
 mixed, boiled in a quart of wine
 water, where that cannot be had
 a handful of pearl or wood ashes
 may be boiled in common water;
 pour off the decoction when set-
 tled, and mix with it half a pint
 of port or wine: anoint the part
 afterwards with linseed oil, or
 elder ointment, to soften and
 smooth the skin.

When
 critical,
 now
 treated

But when these swellings are critical,
 the consequence of a fever settled on
 this part, you must avoid the repelling
 method, and assist in bringing the swell-
 ing to matter by means of suppurating
 poultices: experienced farriers advise
 never to open these tumors till they
 break of themselves; for if they are
 opened before they are ripe, the whole
 fore will be spongy, and discharge a
 bloody

bloody ichor, which ſoon degenerates into a ſordid ulcer. But take care to enlarge the openings and pare away the lips, that your dreſſings may be applied eaſily; and avoid the ligament which runs along the neck to the withers; if a gathering forms on the oppoſite ſide, open it in the ſame manner, but take care they incline downwards; for the ſake of depending oriſces, and letting the matter flow off eaſily. For the method of dreſſing we muſt refer to the preceeding chapter; and if the bones ſhould be found foul; they muſt be dreſſed with tincture of myrrh till they ſcale off: if the fungus is very troubleſome, and diſcharge oily, yellow and viſcid, pledgits ſoaked in the following made hot have been found very effectual, bathing the ſwelling round with ſpirit of wine and vinegar.

TAKE half an ounce of blue vitriol, A drying diſſolved in a pint of water; oil of turpentine, and rectified ſpirit of wine, of each four ounces; white wine vinegar ſix ounces; oil of vitriol and Ægyptiacum, of each two ounces.

When

When the cavities are truly fistulous, the callosities must be cut out, where it can be done, with the knife; and the remainder destroyed by corrosives, viz. precipitate, burnt allum, and white vitriol, as we have already observed in the chapter on *Ulcers*.

Warbles
described.

Warbles are small hard tumors under the saddling part of a horse's back, occasioned by the heat of the saddle in travelling, or its uneasy situation. A hot greasy dish-clout at first frequently applied, will sometimes remove them. Camphorate spirits of wine are also very effectual for this purpose to disperse them, to which a little spirit of sal ammoniac may be added. The repellents above mentioned are successfully applied in these cases, and if you are obliged to work the horse, take care your saddle is nicely chambered.

A fit-fast,
what.

A fit-fast proceeds generally from a warble, and is the horse's hide turned horny, which if it cannot be dissolved and softened by rubbing with the mercurial ointment, must be cut out, and treated then as a fresh wound.

CHAP.

C H A P. XXXIII.

Of Wind-Galls, Blood and
Bog-Spavins.

A *Wind-gall* is a flatulent swelling, ^{Wind-} which yields to the pressure of ^{galls de-} the finger, and recovers its shape on ^{scribed.} the removal thereof: the tumor is visible to the eye, and often seated on both sides of the back sinew, above the fetlocks, on the fore legs; but most frequently on the hind legs; though they are met with in various parts of the body, where ever membranes can be so separated, that a quantity of air and serosities may be included within their duplicatures.

When they appear near the joints ^{How} and tendons, they are generally caused ^{caused.} by strains, or bruises on the sinews, or the sheath that covers them; which by being overstretched, have some of their fibres ruptured; whence probably may ouze out that fluid which is commonly found with the included

M m

air:

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air: though where these swellings shew themselves in the interstices of large muscles, which appear blown up like bladders, air alone is the chief fluid; and these may safely be opened, and treated as a common wound.

How they
should be
treated.

On the first appearance of wind-galls, their cure should be attempted by restringents and bandage; for which purpose let the swelling be bathed twice a day with vinegar, or verjuice alone, or let the part be fomented with a decoction of oak bark, pomegranate and allum boiled in verjuice; binding over it, with a rowler, a woollen cloth soaked in the same. Some for this purpose use red wine lees, others curriers shavings wetted with the same, or vinegar, bracing the part up with a firm bandage.

Repeated
blistering
recom-
mended.

If this method after a proper trial, should not be found to succeed, authors have advised the swelling to be pierced with an awl, or opened with a knife; but mild blistering has in general the preference given to these methods;

methods; the included fluids being thereby drawn off, the impacted air dispersed, and the tumor gradually diminished. A little of the blistering ointment should be laid on every other day for a week, which brings on a plentiful discharge, but generally in a few days is dried up, when the horse may be put to his usual work; and the blistering ointment renewed in that manner once a month or oftner, as the horse can be spared from business, till the cure is completed. This is the only method to prevent scars, which firing of course leaves behind, and unless skilfully executed, too often likewise a fullness on the joint with stiffness; the mild blistering ointment, where the sublimate is left out, is the properest for this purpose.

A *blood-spavin* is a swelling and dilatation of the vein that runs along the inside of the hock, forming a little soft swelling in the hollow part, and is often attended with a weakness and lameness of the hock.

A blood
spavin de-
scribed.

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The cure. The cure should first be attempted with the restringents and bandage, above recommended, which will contribute greatly to strengthen all weaknesses of the joints, and frequently will remove this disorder, if early applied: but if, by these means the vein is not reduced to its usual dimensions, the skin should be opened, and the vein tied with a crooked needle and wax thread passed underneath it, both above and below the swelling, and the turgid part suffered to digest away with the ligatures: for this purpose the wound may be daily dressed with turpentine, honey and spirit of wine, incorporated together.

A bog spavin described. A *bog-spavin* is an encysted tumor on the inside the hough, or according to Dr. *Bracken*, a collection of brownish gelatinous matter, contained in a bag, or cyst, which he thinks to be the lubricating matter of the joint altered, the common membrane that incloses it, forming the cyst: this case he has taken the pains to illustrate in a young colt

colt of his own, where he says, When the spavin was pressed hard on the inside the hough, there was a small tumor on the outside which convinced him the fluid was within side the joint: he accordingly cut into it, discharged a large quantity of this gelatinous matter, dressed the sore with dossils dipped in oil of turpentine, putting into it, once in three or four days, a powder made of calcined vitriol, allum and bole: by this method of dressing the bag sloughed off and came away, and the cure was successfully compleated without any visible scar.

The
operation
and cure.

This disorder, according to the above description, will scarcely submit to any other method, except firing, when the cyst ought to be penetrated to make it effectual; but in all obstinate cases that have resisted the above methods, both the cure of this, and the swellings called wind-galls should, I think, be attempted in this manner. If through the pain attending the operation or dressings, the joint should swell

Recom-
mended
in obsti-
nate wind
galls.

swell and inflame, foment it twice a day, and apply a poultice over the dressings till it is reduced.

C H A P. XXXIV.

Of Mallenders *and* Sallenders.

Mallenders described.

MAllenders are cracks in the bend of the horse's knee, that discharge a sharp indigested matter; they are often the occasion of lameness, stiffness, and the horse's tumbling.

Sallenders what.

Sallenders are the same distemper, situate on the bending of the hough, and occasion a lameness behind.

They are both cured by washing the parts with a lather of soap warmed, or old chamberlye; and then applying over the cracks a strong mercurial ointment spread on tow, with which they should be dressed night and morning till all the scabs fall off: if this should not succeed, anoint them night and

Of Lampas, Barbs, &c. 271

and morning with a little of the following, and apply the above ointment over it.

T A K E hogs lard two ounces ;
sublimate mercury two drams.

Take the next from *Gibson*, which is to be depended on.

Æthiops mineral half an ounce ;
White vitriol one dram ;
Soft green soap six ounces.

Anoint with this often, but first clip away the hair, and clear the scabs.

C H A P. XXXV.

Of Lampas, Barbs, and
Wolves Teeth.

T H E *Lampas* is an excrescence in the roof of the horse's mouth, which is sometimes so luxuriant that it grows above the teeth, and hinders his feeding. The cure is in lightly cauterising the flesh with a hot iron, taking

The lampas, and cure.

taking care that it does not penetrate too deep, so as to scale off the thin bone that lies under the upper bars: the part may be ginted with burnt allum and honey, which is proper for most sores in the mouth.

Barbs
what, and
how cured. Barbs are small excrescences under the tongue, which may be discovered by drawing it aside, and are cured by cutting close off, and washing with brandy, or salt and water.

**Wolves
teeth,
what.** A horse is said to have *wolves teeth*, when the teeth grow in such a manner, that their points prick, or wound either the tongue, or gums, in eating. Old horses are most liable to this infirmity, and whose upper overshoot the under teeth in a great degree.

The cure. To remedy this evil you may either chop off the superfluous parts of the teeth with a chizel and mallet, or file them down, which is the better way, till you have sufficiently wasted them.

C H A P. XXXVI.

Of the GREASE.

IN order to treat this disorder with some propriety (without having recourse to *humours* falling down for its explanation) I shall consider it as arising from two different causes; a fault or relaxation in the vessels, or a bad disposition in the blood and juices; but unless the reader has some idea of the blood's circulation, or will give himself a little trouble to obtain it, this doctrine will be of little use to him, and he must be content to be still imposed on with the usual cant of *humours*. We have already explained our meaning on this subject in a preceeding chapter, and shall here only observe, that the blood and juices (or *humours*, for there are always some in the best state of blood) are brought to the extreme parts by the arteries, and returned by the veins; in which latter the blood is to rise in perpendicular columns, to return the circulating

N n fluids

How
swellings
in the
limbs are
occasioned

fluids from the extremities : hence swellings in the legs of horses may easily be accounted for, from a partial stagnation of the blood and juices in the finer vessels, where the circulation is most languid ; and especially when there is want of due exercise, and a proper muscular compression on the vessels, to push forward the returning blood ; in short the blood in such cases cannot so readily ascend as descend, or a greater quantity is brought by the arteries than can be returned by the veins.

The
grease
should
sometimes
be treated
as local.

The grease then considered in this light, must be treated as a local complaint, where the parts affected are alone concerned, the blood and juices being yet untainted, and in good condition ; or as a disorder where they are both complicated : but when it is an attendant on some other distemper, as the farcy, yellows, dropsy, &c. such diseases must first be cured before the grease can be removed. In the former case moderate exercise, proper dressing, cleanliness, and external applications, will answer the purpose ;
in

in the latter, internals must be called in to our assistance, with proper evacuations.

When a horse's heels are first observed to swell in the stable, and subside, or go down, on exercise; let care be taken to wash them very clean every time he comes in, with soap-suds, chamberlye, or vinegar and water, which, with proper rubbing, will frequently prevent, or remove this complaint: or let them be well bathed twice a day with old verjuice, or the following mixture, which will brace up the relaxed vessels; and if rags dipped in the same are rowled on with a proper bandage, for a few days, it is most likely the swellings will soon be removed by this method only, as the bandage will support the vessels, till they have recovered their tone.

How
swelled
heels
should be
treated.

TAKE rectified spirit of wine four ounces, dissolve in it half an ounce of camphire, to which add wine-vinegar or old verjuice six ounces, white vitriol dissolved in
N n 2 a gill

A repel-
ling wash.

a gill of water, one ounce; mix together, and shake the vial when used.

But if cracks or scratches are observed which ouse and run, let the hair be clipped away, as well to prevent a lodgment (which becomes stinking and offensive by its stay) as to give room for washing out dirt or gravel, which if suffered to remain there, would greatly aggravate the disorder.

Poultices
often ne-
cessary.

When this is the case, or the heels are full of hard scabs, it is necessary to begin the cure with poultices, made either of boiled turneps and lard, with a handful of linseed powdered; or oatmeal and rye-flower, with a little common turpentine, and hogs lard boiled up with strong beer grounds, or red wine lees. The digestive ointment being applied to the sores for two or three days, with either of these poultices over it, will by softening them, promote a discharge, unload the vessels, and take down the swelling; when they may be dried up with the following:

TAKE

TAKE white vitriol and burnt alum, of each two ounces; *A drying water.* Ægyptiacum one ounce; lime-water a quart or three pints: wash the sores with a sponge dipped in this, three times a day, and apply the common white ointment spread on tow; to an ounce of which may be added two drams of sugar of lead.

Or the following wash and ointment may be used for that purpose.

TAKE half an ounce of Roman vitriol, dissolve it in a pint of water; *Another drying water.* then decant off the clear into a quart bottle, add half a pint of camphorated spirits of wine, the same quantity of vinegar, and two ounces of Ægyptiacum.

TAKE honey four ounces, white or red lead powdered two ounces, *A drying ointment.* verdigrease in fine powder one ounce; mix together.

Some for this purpose apply allum-gurd; others a strong solution of allum
in

in verjuice, with honey: and many of these forms may easily be contrived. But let it be remembered, that as soon as the swelling is abated, and the moisture lessened, it would be very proper to keep the legs and pasterns rolled up with a firm bandage, or linen roller two or three fingers wide, in order to brace up the relaxed vessels, till they have recovered their natural tone.

How
caused
when
from an
internal
cause.

This method is generally very successful when the distemper is only local, and requires no internal medicines; but if the horse be full and gross, his legs greatly gorged, so that the hair stands up, and is what some term *grey-feathered*, and has a large stinking discharge from deep foul sores, you may expect to meet with great trouble, as these disorders are very obstinate to remove, being often occasioned by a poor dropical state of blood, or a general bad disposition in the blood and juices.

The cure in this case, if the horse is full and fleshy, must be begun by
bleeding,

bleeding, rowels and repeated purging; after which diuretic medicines are frequently given with success. Thus,

TAKE four ounces of yellow rosin, A diuretic drink.
one of sal prunellæ; grind them together with an oiled pestle, add a dram of oil of amber, and give in a quart of forge water every morning, fasting two hours before and after taking, and ride moderately.

As this drink is found very disagreeable to some horses, I would recommend the nitre balls in its stead, given to the quantity of two ounces a day, mixed up with honey, or in his feeds: Take the following also for that purpose.

YELLOW rosin four ounces, salt of tartar and sal prunellæ, of each Diuretic balls.
two ounces; Venice soap half a pound; oil of juniper half an ounce: make into balls of two ounce weight, and give one every morning.

The

~~Foment~~
~~the~~
~~foment~~
~~the~~
~~the~~ The legs in this case should be bathed or fomented, in order to breathe out the stagnant juices, or to thin them, so that they may be able to circulate freely in the common current. For this purpose foment twice a day with the deficient fomentation, in which a handful or two of wood-ashes has been boiled; apply then the above poultices, or the following, till the swelling has subsided, when the sores may be dressed with the green ointment till they are properly digested, and then dried up with the water and ointment above recommended.

▲
Excretion:
poultice.

TAKE honey one pound, turpentine six ounces, incorporate with a spoon; and add of the meal of fenugreek and linseed each four ounces; boil in three quarts of red wine lees to the consistence of a poultice; to which add, when taken from the fire, two ounces of camphor in powder; spread it on thick cloths, and apply warm to the legs, securing it on with a strong rowler.

If

If the sores are very foul, dress them with two parts of the wound ointment and one of *Ægyptiacum*; and apply the following, spread thick on cloths, and rowled on.

TAKE of black soap a pound, honey half a pound, burnt allum four ounces, verdigrease powdered two ounces, wheat-flower a sufficient quantity. A
cleansing
poultice.

If the diuretic balls should not succeed, they must be changed for the antimonial and mercurial alteratives, already mentioned; but turning a horse out into a field, where he has a hovel or shed to run to at pleasure, would greatly contribute to quicken the cure, and indeed would in general effect it alone; but if this cannot be complied with, let him be turned out in the day-time.

If the horse is not turned out, a large and convenient stall is absolutely necessary, with good dressing and care: this stall should be six feet wide, that

O o

a tall

a tall horse may shoot out his legs at length, so that the blood may circulate freely, without meeting with resistances, which it naturally must, when a horse lies all on a heap, or with his legs under him: nor should the stable be paved with too great a declivity; for if the horse stands too low with his hind legs, most of his weight will rest upon them, and give him the greafe, especially if he is at all inclined to be gourdy.

A horse
lying
down, of
great service.

The last thing we shall recommend, is a method to oblige a horse to lay down in the stable. This undoubtedly is of the utmost consequence, as it will not a little contribute to the removal and cure of this disorder; for by only changing the position of his legs, a freer circulation would be obtained, and the swelling taken down: whereas in general it is greatly aggravated by the obstinacy of the horse, who refuses to lie down at all (probably from the pain it gives him to bend his legs for that purpose;) by which means the stiffness and swelling
in-

increases, till the over-gorged and distended vessels are obliged to give way, and by bursting discharge the fluids which should circulate through them.

The method proposed by Dr. *Bracken* is to tie up one of his fore feet close, and to fasten a cord or small rope about the other fetlock, bringing the end of it over the horse's shoulders; then let him be hit, or kicked with your foot behind that knee, at the same time pulling his nose down strongly to the manger, you will bring him upon his knees, where he should be held till he is tired, which cannot be long; but if he does not lie down soon, let him be thrust sideways against his quarters to throw him over: by forcing him down several times in this way, you may teach him to lie down at the same words you first used for that purpose. —Other means are recommended for this purpose, such as tying the horse's tail with a cord, touching his skin with oil of vitriol, &c.

Thus have I endeavoured to distinguish this disorder, and to point out

what and where internals are necessary, and in what cases the cure may be effected by external applications only.

CHAP. XXXVII.

Of Scratches, Crown-Scabs, and Rat-Tails.

Scratches in the heels have so much affinity with the grease, and are so often consequences of that distemper, that the method of treating them may be related chiefly from the preceding chapter. which at first should be by the linseed and turnep poultice, with a little common turpentine to soften them, and relax the vessels; the green ointment may then be applied for a few days to promote a discharge, when they may be dried up with the ointments and washes recommended in the ^{several} above chapter. It is best afterwards ^{how soon} to keep the heels supple, and softened with curriers dubbing, which is made of oil and tallow. This will keep the hide from cracking, and be as good a pre-

preservative as it is to leather; and by using it often before exercise, will prevent the scratches, if care is always taken to wash the heels with warm water, when the horse comes in. When they prove obstinate, and the sores are deep, use the following; but if any cavities or hollow places are formed, they should first be laid open, for no foundation can be laid for healing, till you can dress to the bottom.

TAKE Venice turpentine four ounces, quicksilver one ounce; incorporate well together by rubbing some time, and then add honey and sheeps suet, of each two ounces.

An ointment for obstinate scratches.

Anoint with this once or twice a day; and if the horse is full or fleshy, you must bleed and purge; and if the blood is in a bad state, the alteratives must be given to rectify it.

The crown-scab is an humour that breaks out round the coronet, which is very sharp and itching, and attended with a scurfyness: sharp waters, prepared with vitriol, are generally used for

The crown scab, how treated.

C H A P. XXXVIII.

Of the Diseases of the FEET.

*Of Narrow Heels, and Binding of
the Hoof, &c.*

THOUGH narrow heels in general arise from a natural defect, yet they are often rendered incurable by bad shoeing; for some farriers hollow the quarters so deep and thin, that they may be pinched in with the fingers, and think by that method to widen them out by a strong broad webbed shoe; but this turns them narrow above, wires their heels, and dries, or rots the frog. The best way in all such cases is not to hollow the foot in shoeing, and to pare nothing out, but what is rotten or foul; if the foot be hard and dry, or inclined to be rotten, bathe it often with chamberlye, or boil two pounds of linseed bruised, in two quarts of the same, to the consistence of a poultice, then add six ounces of soft green soap, and anoint

Narrow heels often ruined by bad shoeing.
How they should be managed.

anoint the foot with it every day, rubbing a little of it upon the sole. Or,

An ointment for the hoofs.

TAKE bees wax two ounces, fresh butter or lard six ounces, tar one ounce, as much linseed or neats-foot oil as will make it the consistence of a smooth ointment.

How dry hoofs should be treated.

The hoofs if too dry may be anointed with the above, or with lard only; some for this purpose use tar, tallow and honey, but most greasy and unctuous applications will answer this intention; the feet also if too dry, may be stuffed with bran and lard heated, or worked up together in the hand; which is very proper also to apply every night, when your horse is travelling in hot weather, on roads that are dry and hard; cow-dung likewise is a proper stuffing for the feet, but vinegar should cautiously be mixed with it; for though it is a known cooler, it is a remarkable restraining, which in this case would be extremely prejudicial; instead of which a print of fresh butter may be first applied to the sole, and the cow-dung laid over it.

There

There is another disorder the hoofs ^{How} are subject to, which is their being ^{moist} too soft and moist; this may be con- ^{hoofs} stitutional, or proceed from going ^{should be} much in wet and marshy grounds, ^{treated,} standing constantly in wet litter, or any infirmity that may bring too great a moisture into the feet. In this case, the horse's hoofs may be bathed every day with warm vinegar, verjuice, copperas water, and such like restringents; to which may be added galls, allum, &c. remembering to let the horse stand constantly dry.

We say a horse is hoof-bound, when ^{Hoof-} the hoof is so tight round the instep, ^{bound,} that it turns the foot somewhat into ^{what.} the shape of a bell. This is caused sometimes by shoeing as above to widen the heel, and sometimes by cutting the toes down too much, which gives that shape to the foot, and causes the horse to go lame.

To remedy this disorder, Mr. *Gibson* ^{How} recommends the following method; ^{remedied.} Let the foot be drawn down from the
P p coronet

coronet almost to the toe with a drawing knife, making seven or eight lines or razes through the hoof, almost to the quick; afterwards keep it charged with pitch, or rosin. till the lines are wore out in shoeing, which will require several months; therefore horses are generally turned out to graze. Before we close this chapter, take these ointments for the feet and hoofs, *viz.*

Oint-
ments for
the feet
and hoofs.

Sweet oil, rosin, and hogs lard, each a pound, bees wax two ounces, honey a pound, melt together. Or,

TAKE basilicon one pound, wax and neats-foot oil, of each half a pound, rosin four ounces, mix together.

C H A P. XXXIX.

Of Sand-Cracks and Quittors.

A sand-
crack de-
scribed.

WHAT is called a sand-crack, is a little cleft on the outside the hoof; if it runs in a strait line downwards, and penetrates through the bony part

part of the hoof, it often proves troublesome to cure; but if it passes through the ligament that unites the hoof with the coronet, it is then apt to breed a quittor, or false quarter, which are dangerous.

When the crack only penetrates through the hoof, without touching the ligament, unless the hoof be hollow, it may easily be cured, by rasping only the edges smooth, and applying thick pledgits of basilicon, and binding them down with a piece of soft lilt. But if you perceive any hollow-ness under the hoof, and that the cleft has a tendency to penetrate through the gristle, or ligament, the best method in that case is to fire out of hand with irons that are not made too hot, first rasping very thin and wide, from both sides of the cleft. The horse must not carry any weight for some time, but be turned out to grass, or wintered in a good farm yard.

How
treated.

A quittor is an ulcer formed between the hair and hoof, usually the inside

A quittor
described.

inside quarter of a horse's foot; it arises often from treads and bruises, sometimes from gravel, which by working its way upwards, lodges about the coronet: if it is only superficial, it may be cured with cleansing dressings, bathing the coronet every day with spirit of wine, and dressing the sore with the precipitate medicine.

How
cured in
particular
cases.

But if the matter forms itself a lodgment under the hoof, there is no way then to come at the ulcer, but by taking off part of the hoof; and if this be done artfully and well, the cure may be effected without danger.

When the matter happens to be lodged near the quarter, the farrier is sometimes obliged to take off the quarter of the hoof, and the cure is then, for the most part, but palliative; for when the quarter grows up, it leaves a pretty large seam, which weakens the foot; this is what is called a false quarter, and a horse with this defect, seldom gets quite sound.

If

If the matter by its confinement, has rotted the coffin-bone, which is of so soft and spongy a nature, that it soon becomes so; you must enlarge the opening, cut away the rotten flesh, and apply the actual cautery, or hot iron pointed pyramidically, and dress the bone with dossils of lint dipped in tincture of myrrh, and the wound with the green or precipitate ointment. When the sore is not enlarged by the knife, which is the best and less painful method, pieces of sublimate are generally applied, which bring out with them cores, or lumps of flesh; blue vitriol powdered, and mixed with a few drops of the oil, is used also for this purpose, and is said to act as effectually, and with less pain and danger: during the operation of these medicines, the foot, I think, should be kept in some soft poultice, and care should be taken, during the whole dressing, to prevent proud flesh rising, which otherwise will not only retard the cure, but prevent a firm and sound healing.

How
cured
when the
coffin-
bone is
affected.

C H A P. XL.

Of Wounds in the Feet, from
Nails, Gravel, &c.

Wounds
in the
feet should
particular-
ly be at-
tended to.

Accidents of this sort are very common, and sometimes for want of early care, prove of bad consequence; for the parts being naturally tender, are very susceptible of inflammation; and when matter is once formed, if a free discharge is not procured, the bone which is spongy soon becomes affected, and the whole foot is then in danger.

In what
manner
they
should be
treated in
general.

When any extraneous bodies, such as nails, stubs, thorns, &c. have passed into the horse's foot, you should endeavour to get them out as soon as possible; and after washing the part with oil of turpentine, dress the hole with lint dipped in the same melted down with a little tar; the foot may be stopped up with bran and hogs lard heated together, or put it into the turnep or any soft poultice: this method is generally

generally successful, when the nail, &c. is intirely removed; but if any piece or particle should remain behind, which may be suspected by the degree of pain, and discharge of matter; after paring away the soal as thin as possible, introduce a bit of sponge tent, in order to enlarge the hole, that it may be drawn out by a small pair of forceps, or brought away by digestion. If this method should not succeed, but the lameness continues with a discharge of a thin, bloody, or stinking matter, you must no longer delay opening the wound with a drawing knife to the bottom, and then dress as above directed.

If the lameness proceeds from pricking in shoeing, the foot should be pared thin on the wounded side, and after dressing with the tar and turpentine, let it be stopped up with the poultices above mentioned, or with two ounces of common turpentine melted down with four of lard; should this method not succeed, follow the above directions.

When
from
pricking
in shoeing

When

When
from
gravel.

When gravel is the cause, it for the most part follows the nail holes, and if it gets to the quick, cannot return, unless it is scraped out; for the make of the hoof, which is spiral like an ear of corn, favours its ascent, so that the gravel continues working upwards towards the coronet, and forms, what the farriers call, a quittor-bone.

The cure.

The nature of this disorder points out the method of cure, which is to be as expeditious and careful as possible in getting out the gravel; if it is found difficult to effect this, let the sole or hoof be pared thin, and if necessary the wound enlarged to the bottom, and then dressed up as usual. Should the coffin-bone be affected, you must follow the directions laid down in the preceeding chapter, remembering always to bathe the hoof with vinegar or repellers, in order to allay the heat and inflammation, which often happen on such occasions; and should the pain and anguish affect the legs, treat them in the same manner, or charge the leg and pastern with a mixture of wine lees and vinegar.

C H A P.

C H A P. XLI.

*Of the Running Thrush, and
Canker, and Loss of Hoof.*

THE thrush or frush is an im-
postume that sometimes gathers
in the frog; or a scabby and ulcerous
disposition, which sometimes causes it
to fall off. When the discharge is
natural, the feet should be kept clean,
but no drying washes made use on, it
being thought as unsafe to repel some
of these discharges, as to cure some
sweaty feet.

The
running
thrush
described.

When an impostume or gathering
appears, the safest way is to pare out
the hard part of the frog, or whatever
appears rotten, and wash the bottom
of the foot, two or three times a day
with old chamberlye; this is the safest
and best way of treating them. But
when a horse has been neglected, and
there is a strong flux to the part, it is
apt to degenerate into a canker, to
prevent which, use the following:

The
method of
cure.

Q q

TAKE

298 *Of the Running Thrush, and*

A wash
for the
thrush.

TAKE spirit of wine and vinegar,
of each two ounces; tincture of
myrrh and aloes one ounce;
Ægyptiacum half an ounce;
mix together.

Bathe the thrush with this, wherever
there appears a more than ordinary
moisture, and lay over the ulcer a
little tow dipped in the same. The
purges and diuretics recommended in
the grease should be given at this time,
to prevent the inconveniencies that
the drying up these discharges fre-
quently occasion.

A canker
described,
with the
cure.

A canker in the foot proceeds for
the most part from thrushes, when they
prove rotten and putrid, though many
other causes may produce this disorder.
The method used by farriers for the
cure, is generally with hot oils, such
as vitriol, aqua fortis, and butter of
antimony, which are very proper to
keep down the rising flesh, but should
be used daily till the fungus is sup-
pressed; when once in two days will
be sufficient, strewing fine precipitate
powder

Canker, *and* Loss of Hoof. 299

powder over the new grown flesh,
till the foal begins to grow.

There is one great error committed Observation.
often in this cure, that is, in not
having sufficient regard to the hoof;
for it should not only be cut off, where-
ever it presses on the tender parts, but
should be kept soft with linseed oil;
and as often as it is dressed, bathe the
hoof all round the coronet with cham-
berlye. Purging is very proper to
compleat the cure.

The loss of the hoof may be occa- The loss
of the
hoof, how
repaired.
sioned by whatever accident may bring
an impostumation into the feet, where-
by the whole hoof becomes loosened,
and falls off from the bone. If the
coffin bone remains uninjured, a new
hoof may be procured by the follow-
ing method :

The old hoof should by no means
be pulled off, unless some accident
happens that requires its removal, for
it serves as a defence to the new one,
and makes it grow more smooth and
even, and indeed nature will in gener-

ral do this office at her own proper time.— On the removal of the hoof, a boot of leather with a strong soal, should be laced about the pastern, bolstering and stopping the foot with soft flax, that the tread may be easy; dress the fore with the wound ointment, to which should be added the fine powders of myrrh, mastich, and olibanum. If this medicine should not be sufficient to prevent a fungus, burnt allum or precipitate may be added to it, and the luxuriant flesh may be daily washed with the sublimate water.

C H A P. XLII.

*Of Venomous Bites from Vipers
and Mad Dogs.*

The
action of
poisons,
not to be
accounted
for.

THE action of poisons on animal bodies has hitherto appeared of so intricate a nature, and the nervous system, which is so principally affected by them, so imperfectly understood, that

that it is no wonder the most ingenious authors have given so little satisfaction in treating this subject; we shall therefore only offer such remedies, and methods of cure, as stand recommended to us on the best authority.

The first intention is to prevent the poison mixing with the blood; this possibly might be effected, if the part would admit of being instantly cut out with a knife, that cupping glasses might be applied to empty the vessels, and the wound afterwards cauterised with a hot iron. The surrounding parts should afterwards be well bathed with sallad oil, and the sore dressed once or twice a day with hot *Ægyptiacum*. It is necessary also that it should be kept open for forty days at least, with a piece of sponge or orrice root smeared over, with the precipitate ointment, or that prepared with Spanish flies: these seem to be the chief external remedies to be depended on.

Internally, for bites from vipers, may be given cordial medicines, such as bites from vipers.

as Venice treacle and salt of hartshorn, an ounce of the former with a dram of the latter every night for a week; or, where it can be afforded, a proportionate quantity of the famous Tonquin remedy of musk and cinabar, so much recommended in bites from infected animals.

Dr. Mead's
method
described,
for bites
from mad
dogs.

To prevent the tragical effects of the bite from a mad dog, give the above medicines; or the method recommended by *Dr. Mead*, may be pursued in the following manner: take away three quarts of blood, and give the horse night and morning half an ounce of ash-coloured ground liver wort, and a quarter of an ounce of pepper; this remedy may be continued a week or ten days, when the horse should be plunged into a river or pond every morning for a month or six weeks.

Dr.
James's
mercurial
method
recommended
for the
same.

The following mercurial method having been found successful both in dogs and men; I thought proper to recommend it as a remedy for horses, and indeed think it more to be depended

pended on than most others. Dr. James has given a full account of it in the *Philosophical Transactions*, to which I refer the curious reader for particulars, observing only that the quantity of turbith given so successfully to dogs, were seven grains the first dose, and twelve the second, at the distance of twenty four hours each; which was repeated every other day for some little time: this course was also repeated at two or three succeeding fulls and changes of the moon.

The same method may be observed in giving this medicine to a horse, the quantity only being augmented to a scruple and half a dram each dose; the directions laid down in the chapter on *Farcy*, being attended to. There are various other remedies directed for these purposes, but the present, I think, are chiefly to be relied on.

We shall close this chapter however with the following, which has long been in great esteem, and is by
some

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some thought to be an infallible cure
for the bite of a mad dog.

A
drink for
venomous
bites.

TAKE six ounces of rue; Venice
treacle, garlick, and tin scraped,
of each four ounces; boil in two
quarts of ale over a gentle fire,
to the consumption of half;
strain off from the ingredients,
and give the horse four or
five ounces every morning fast-
ing.

The ingredients may be beat in a
mortar, and applied daily to the
wound as a poultice.

C H A P. XLIII.

Of Gelding, Docking, and Nicking of Horses.

TO treat of the operations in
farriery, is somewhat foreign
to our original design; but as we have
a new apparatus and method to offer,
con-

concerning the Nicking of horses, we were induced also to make some few observations on Gelding and Docking, especially as the symptoms of the latter, and manner of treating them, are on similar principles.

Without entering into particulars, we shall only observe that the *Gelding* of a foal, is an operation of little consequence, and seldom attended with any bad symptoms; yet the extirpating the stones of a full grown horse, requires the care and ingenuity of a good artist. The usual method of securing the spermatic vessels, is by cauterising their extremities, and filling up the scrotum or bag with salt: this method, though successfully practised on young colts, should by no means be trusted to, in grown horses; but after the scrotum is opened, and the stone turned out, a strong waxed thread should be tied round the chord, and then the testicle cut off: this undoubtedly is the most effectual way to secure the vessels, as the eschar from burning may by accidents be removed, and

Some useful observations on gelding.

The ligature preferred to the cautery.

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a profuse bleeding ensue before it is discovered.

The manner of dressing, and general treatment. The wound may be dressed with the usual digestive; but should a fever, or inflammation ensue, bleed largely, and follow the directions laid down in the chapter on *Fevers*: should the belly and sheath swell, foment twice a day, and bathe often with oil of roses and vinegar, till the tumor subsides, and wound digests.

Some general directions in relation to docking. In regard to the *Docking* of horses, though it is an operation so common, and in general so successfully executed, yet, as it does now and then miscarry, by an inflammation and gangrene succeeding, which sometimes are communicated to the bowels; we have thought proper to lay down some general rules and directions, both in relation to the operation, and the subsequent manner of treating the symptoms; and as these most probably arise from the tendons of the tail, suffering by an injudicious application of the knife, or searing iron, or an improper season for the operation,

operation, we shall first observe, that the very hot or cold months are by no means proper for that purpose, for reasons we apprehend obvious to every one: the next observation we shall make is, that it should always be performed by incision, or the chopping engine; the knife being passed through the tail from above, while it lays on the block; for when the cutting instrument is applied underneath, the blow is then given on the tail, which of course, by bruising the tendons, may well be suspected to occasion bad symptoms: The last observation we shall make is in regard to the searing iron, which should be smooth, and better polished than those generally used, and ought to be rubbed clean on a woollen cloth, before the application to the stump, otherwise the sparks which fly from the iron, are apt to occasion great pain, with swelling both of the sheath and fundament; nor should it ever be applied flaming hot, for then it brings the burnt part away with it, and as it requires a re-application, in order to form a new eschar on the vessels,

The very hot or cold months improper for this operation.

Cautions in searing.

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the bone by these means is frequently left too much exposed, so that it is often a considerable time before it is covered.

The manner of dressing the stump, and general treatment. Farriers seldom apply any thing to the stump; which need only be anointed with the wound ointment, and when the eschar is digested off, may be washed with allum or lime-waters: but if an inflammation ensues, with a discharge of thin matter, the turpentine digestive with tincture of myrrh should be applied, with the bread and milk poultice over it; bathe the rump often with oil of roses and vinegar, bleed largely, and observe the cooling method laid down in the chapter on *Fevers*; and if the fundament is swelled, and the inflammation at all suspected to be communicated to the bowels, let cooling emollient glysters particularly be injected two or three times a day. Should a gangrene ensue, add Ægyptiacum to your dressings, and spirits to the fomentation; and apply over all, the strong beer poultice with London treacle twice a day.— These seem to be

be the only means to be depended on, and will without doubt, in general be successful, when applied in due time.

Before we describe the operation of *Nicking*, it may be necessary to inquire how the effect of it (the elevation of the tail) is brought about; and in order to know this, and judge with propriety of the operation, we must consider the tail, as elevated or lifted up, by one set of muscles, and depressed or pulled down by another.

Is is somewhat remarkable, that *Snape*, *Saunier*, and *Gibson*, who in general are pretty exact in their anatomical descriptions, should omit, in their account of the muscles of a horse, to describe those of the tail; for which reason, as a proper opportunity has not offered, to supply this omission, by making a compleat dissection, with that accuracy we could have wished; it is hoped the subsequent imperfect description will be excused, as it was taken only from a tail, that was dissected after docking.

Here

An anatomical description of the tail.

Here we observed, that the muscles which elevate the tail, are more numerous, large, and strong, than those that depress it; that they are closely connected to the bones of the tail by fleshy fibres, and terminate in strong tendons, at the extremity: but the muscles of the latter soon form into tendinous expansions, and three large tendons, which are inserted into the latter bones of the tail: there are several other small tendons, which run laterally, whose use most probably is to move the tail sideways. The arteries are two in number, and run above the bones of the tail, consequently easily avoided by a dextrous hand, as they cannot readily be wounded by the knife, in dividing the tendons necessary to be cut in this operation.

The operation described.

The art of nicking horses then chiefly consists in a transverse division of these depressing tendons of the tail, and such a position afterwards, as will keep their extremities from coming

Nicking of Horses.

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ing again into contact; so that an intervening callus fills up the vacuity: by these means an additional power is given to the antagonist muscles, *viz.* the elevators; the counter-action of the depressors being manifestly abated by the division of the tendons, and the intervention of the callus.

The usual method of supporting the tail by a pulley and weight, is liable to many exceptions, the extremities of the divided tendons not being by that method kept sufficiently asunder; the situation of the tail being rather inclined to a perpendicular, than a curved direction: this position too is liable to many variations, from the different movements of the horse, and is the reason that the tail frequently inclines to one side; as the nick may heal up faster on one side than the other: the disagreeable situation the horse must stand in, with a weight constantly hanging to his tail, is another material objection, besides the necessity of removing it, when the horse

The inconveniences of the old method.

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horse is exercised, or taken out to water.

A new
method
recom-
mended.

To remedy these inconveniencies, and perfect this operation, a very ingenious gentleman, who had thoroughly considered it, has been so kind as to favour me with a draught, and description of a machine, he contrived for that purpose; which has frequently been practised with the expected success, and indeed at first view appears in every respect calculated to correct all the defects in the old one: as I doubted not its reception being perfectly agreeable to the publick, I have ordered a plate to be engraved, which, with the annexed description, will, I hope, make it very familiar and intelligible to every capacity.

Observa-
tions in
regard to
the opera-
tion.

In regard to the operation, it is worth notice, that the extremities of the tendons, which jut out in the operation need not here be cut off, as is customarily done; the number of the incisions must be in proportion to the length of the tail, but three in general
are

are sufficient. The most approved method of dressing at first, is with powdered rosin and spirit of wine, applying a soft dossil of lint or tow, dipped in the same, between each nick, and lapping the tail up with a linnen cloth and broad fillet; which the next morning should be cut open down the back part of the tail, and the morning after be gently taken off; when it will be proper to plat the hairs, in order to keep them clean, and to set the tail, as will be directed in the plate and references.

Every two or three days the tail should be let down, and the upper part next the rump bathed with hot vinegar; and if it begins to crack, and the hair comes off, a little tincture of myrrh will soon put a stop to it. To obviate any threatening symptoms that may arise in regard to the wounds, have recourse to the above directions on docking.

Some general directions.

After six or eight days, it will be proper to let the horse stand without

S f the

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the machine for a few hours, and then be rode about, in order to observe how he carries his tail; by which means you will the better judge how to fasten it down, whether to confine it closer, or give it more scope: after the wounds are healed up, it may be necessary to keep the tail suspended, till the callus is confirmed, at least for some hours in the day; though a greater liberty may now be allowed it.

The advantages
of the machine.

Thus this machine answers every intention, is far preferable to the pulley, as it keeps the tendons properly separated, and the tail in a certain position; so that the wounds heal up uniformly, without any risk of its being cast to one side; the horse also is more at ease, having no weight constantly pulling and teasing him, and may be taken out to water or exercise, without any inconveniency or disturbance.

C H A P.

C H A P. XLIV.

Of Ruptures, Anticor, Colt-
Evil or Gonorrhæa, *Diseases*
of the Mouth and Feet.

HAVING omitted in their proper places to speak of the above disorders, some of which are not very common or peculiar to horses in this climate, I have thought proper to throw them together in this last chapter, that the reader might not be disappointed in his enquiries after their cure.

In regard then to ruptures, though they are generally divided into particular classes, we shall only observe, that by violent efforts of the horse, or other accidents, the guts or caul may be forced between the muscles of the belly at the navel, and through the rings of the muscles into the scrotum or cod. The swellings are generally about the size of a man's fist, sometimes

Ruptures
described.

times much larger, descending to the very hock; they are frequently soft, and yield to the pressure of the hand, when they will return into the cavity of the belly with a rumbling noise; and in most the vacuity may be felt, through which they passed.

The
method of
treating
ruptures.

On their first appearance endeavours should be made to return them by the hand; but if the swelling should be hard and painful, in order to relieve the stricture, and relax the parts, through which the gut or caul has passed, let a large quantity of blood be immediately taken away, and the part fomented twice or thrice a day, applying over it a poultice made with oatmeal, oil and vinegar, which should be continued till the swelling grows soft and easier, or the gut is returned. In the mean time it would be proper to throw up emollient oily glysters twice a day, and to let the horse's chief diet be boiled barley, scalded malt or bran.

Should the swelling afterwards return, I apprehend the restraining applications

plications usually recommended on these occasions, will avail little without a suspensory bandage; so that an ingenious mechanic in that art is chiefly to be relied on, for any future assistance; though it has been observed, that with moderate feeding, and gentle exercise, some horses have continued to be very useful under this complaint.

The anticor is a disorder not very common among our *English* horses, or those in northern climates; but is particularly taken notice of by the *French*, *Spanish*, and *Italian* writers; who describe it a malignant swelling in the breast, which extends sometimes to the very sheath under the belly; it is attended with a fever, great depressions and weakness, and a total loss of appetite; but this last symptom may probably be owing to an inflammation, which is supposed to affect the whole gullet and throat, so great, as to make the horse swallow with the utmost difficulty, and to indanger suffocation.

The
anticor
described.

The

The cure. The cure should first be attempted by large and repeated bleedings; to abate the inflammation; emollient glysters should be injected twice or thrice a day, with an ounce of sal prunellæ in each, and the cooling drink in the chapter on *Fevers* should be given inwardly; the swelling should be bathed with the marshmallow ointment, and a ripening poultice with onions boiled in it, should be daily applied over it. If by this method, continued four or five days, the inflammation in the throat and gullet is removed, our attention should more particularly turn to encourage the swelling at the breast, and bring it if possible to matter: to which end, continue the poultice, and give two ounces of Venice treacle dissolved in a pint of beer every night; when the swelling is grown soft, it must be opened with the knife, and dressed with the turpentine digestive, the danger now being over.

But

But should it be found impracticable to bring the swelling to matter, and it increases upwards, so as to endanger suffocation; authors have advised to pierce the tumor with a hot pointed cautery in five or six places, to dress with the above digestive, and in order to stimulate and promote a greater discharge, to add to it a small quantity of Spanish flies and euphorbium in powder; fomenting at the same time, and bathing the circumjacent parts with ointment of marshmallows. *M. Guerinere*, as well as *Soloyfel*, have advised opening the skin, when the tumor cannot be brought to matter, in order to introduce a piece of black hellebore root steeped in vinegar, and to confine it there for twenty-four hours; this also is intended as a stimulant, and is said to answer the intention, by occasioning sometimes a swelling as big as a man's head.

Some
particular
directions

Besides the disorders of the mouth, which we have already animadverted

Disorders
of the
mouth de-
scribed.
On

on, there are frequently observed on the inside the lips and palate, little swellings or bladders, called Giggs: flitting them open with a knife, or lancet, and washing them afterwards with salt and vinegar, is in general their cure; but when they degenerate into what are called Cankers, which are known by little white specks, that spread and occasion irregular ulcers; the best method then is to touch them daily with a small flat cautery, moderately heated, till the spreading is stopped, and to rub the sores three or four times a day with *Ægyptiacum* and tincture of myrrh, sharpened with oil or spirit of vitriol; when by this dressing the sloughs are separated, they may be washed frequently with a sponge dipped in copperas or sublimate water, if they continue to spread; or a tincture made by dissolving half an ounce of burnt allum, and two ounces of honey in a pint of tincture of roses. Either of these will dry them up, and are very useful in most disorders of the mouth.

A re-

A relaxation, and swelling of the palate, sometimes happens to horses on catching cold. To remedy this disorder, blow pepper on the part, or anoint it with the same mixed up with honey. The tincture above-mentioned may be used for this purpose, to which may be added half an ounce of spirit of sal armoniac.

A relaxation of the palate.

The colt-evil is supposed to arise from stoned colts having full liberty with mares, before they are able to cover them; whence frequently ensues an excoriation, or fretting on the glands, and a swelling of the sheath; this last disorder frequently proceeds too from dirt or filth lodging there, and is often removed by washing the part clean with butter and beer: but when the yard itself is swelled, foment it twice a day with marshmallows boiled in milk, to which may be added a little spirit of wine; anoint the excoriation with the white ointment, or wash it with a sponge dipped in lime water, to a pint of which may be added two drams of sugar of lead: the yard

The colt-evil, and cure.

T t

should

Of Ruptures, Anticor,

should be suspended up to the belly; and if the swelling should increase with inflammation, bleed and give the cooling phylick, anoint with ointment of elder, and apply the bread and milk poultice.

The gonorrhæa, and cure.

If a simple gonorrhæa, or feminal gleet is observed to drip from the yard, (which is often the case in high fed young horses, where a relaxation of the glands and feminal vessels has been brought on by frequent emissions) let the horse be plunged every day into a river or pond; give him two or three rhubarb purges, at proper distances, and intermediately the following balls:

A strengthening ball.

TAKE of balsam of copivi, or Venice turpentine, olibanum and mastich powdered, of each two drams; bole armoniac half an ounce: mix up into a ball with honey, and give it night and morning, till the discharge lessens, and then every night till it goes off.

Balls prepared with rhubarb and turpentine, may also be given for this purpose. But

But it is worth remarking, that if the horse continues to shed his seed, by rubbing his yard against his belly; no medicines will avail, till he is cured of this vicious habit; which probably nothing will so effectually contribute to remove, as castration, or a proper indulgence with mares.

The Indian rhubarb is not expensive; it may be bought at prime cost, under twelve pence an ounce. Observation.

Figs are spongy swellings on the bottoms of horses feet, generally on the sides of the frush. These or any other kind of excreffences, such as warts, corns, grapes, &c. are best removed by the knife; and if any part of them be left behind, or should shoot up a-fresh, touch them with the caustick, or oil of vitriol, and dress with Ægyptiacum, to which may be added, when they are very rebellious, a small quantity of sublimate; when the roots are quite destroyed, you may incarn with the precipitate medicines, and dry up the sore with the following:

T 1 2

TAKE

to ring
with

RECIPE of white vitriol, allum,
and gale in powder, of each two
ounces; dissolve them by boiling
a little in two quarts of lime
water, and keep in a bottle for
use, which should be shook when
used.

Some
doctors
advise

These drying kind of medicines are
reasonably used to advantage before the
state; which should not be spared
on these occasions, even though the
marks of some of these eruptions are
seen, as they frequently are on the
narrow and thin; for they must be in-
crease evaporated before a radical cure
can be performed. Should a large
bleeding arise from a division of the
artery in the bottom of the foot,
apply close to it a button of tow or
lint covered with powder of allum,
or with vitriol and bole; fill the whole
foot up with dry dressings, closely
applied and secure them on by a
proper bandage. Observe the preced-
ing directions in regard to inflamma-
tion, and dress the wound according to
the rules we have already laid down.

*An Explanation of the two Heads
and Trepan, mentioned in Ch. XII.*

B B. two lines representing the bounds of the cerebellum, or back part of the brain, which is very small in a horie, in proportion to that of a man, as well as the brain itself, which commences from the line D.

CC. a line where the superior part of the sinus frontalis commences, together with a view of the bottom of this sinus, which terminates between the lines D and E, where there appears a substance in the form of a pear, which is the os ethmoides, or sieve-like bone; through which the olfactory nerves pass, by which the pituitary membrane receives its sensibility, and the sense of smelling is performed.

E, represents the beginning of the maxillary sinus, which terminates at M.
The

An Explanation of the

The shaded space which may be observed between these two lines, represents the great cavities. The oblique ray marked F, is a bony partition, which separates this sinus into two parts that have no communication; and sometimes it happens (though but rarely) that there are two bony partitions; and for this reason they are represented by the lines marked F and G. It also sometimes happens (but still more seldom) that there are horses, in whose heads we do not find any of these bony partitions.

N, points out the place of the cornets or horns. O, the redoublings. P, their middle part. Q, the inferior part of them. M, the bony canal or pipe which guards the maxillary nerve.

A A, the septum narium, or partition, which divides the nose from top to bottom, and constitutes the two nostrils.

L, in the head that is intire, points out where the trepan should be applied on the frontal sinus, when we have reason

reason to believe the glanders is spread into this sinus. However I think it safest to apply it first on E, for the reasons mentioned in the next explanation, and because the brain may be endangered, should the sinus be mistook.

E, the place where the trepan may be applied, in order to cleanse the maxillary sinus. The round mark between D and E (which is the impression of the trepan) is however on experience preferred by the author, as the properest place; as one orifice would then be sufficient to wash all the parts, both above and below, with the injection.

But in general, when the maxillary sinus only is affected, penetrate but the upper part, where the syringe points, or thereabouts, and your expectations will be answered; should they not, there seems so little danger in the operation, that you may again perforate at the places above mentioned, higher up. But a proper number of experiments, will soon settle this point with certainty.

H in

H, in the head that is intire, points out the place where another hole, or perforation, should be made, as a drain, to give issue to the glanderous matter washed away by the injection; which could not be discharged without such a depending orifice; and perhaps this perforation alone, in many recent cases, would be sufficient, provided the injection passed freely upwards, and the hole was kept open by means of a hollow leaden pipe constantly retained in it for that purpose, and to procure a free passage for the matter.

I, represents the injection pushed in by the syringe, which flows out by the orifice and the nostril K; during the use of the syringe, it is necessary to hold the nostrils close.

If, in the maxillary sinus, instead of one, there happens to be two bony partitions; it is absolutely necessary to pierce through them both, by means of a stileto, or sharp-pointed ruck, as in the manner represented in the
cut

cut of a horse's head opened; though this conformation seldom occurs.

As these bony partitions may in some particulars vary, should the stileto not have the desired effect, and the injection thrown in by the syringe not come out at H; in such case the liquor should be injected upwards, through the orifice made by the stileto or trepan at H.

As in young horses the frontal and maxillary sinusses are very small, it will be proper to direct the trepan towards the interior part of the nose; otherwise the instrument might work upon the roots of the teeth, which incline towards this sinus, and would in such case be an insurmountable obstacle to the operation.

R the instrument or trepan. S the handle which turns it. T the saw-part to be applied to the bone.

From a view of this instrument, the manner of working it will appear simple and easy. The cooper's

U u managing

managing his wimble being a proper directory.

The instrument called the trephine, which is chiefly used by our *English* surgeons in perforating the skull, will equally answer this purpose; and if any difficulties should arise, notwithstanding this description, the gentlemen of the faculty will soon make it familiar and intelligible.

Before the application of the trepan, or trephine, it is quite necessary to observe, that a circular piece of the skin should first be cut off, with the membrane which covers the bone, about the size of a half crown piece; in order to make the instrument work the easier, and to prevent the inconveniencies which might arise, from the external wounds healing up too fast.

The syringe should be large enough to contain half a pint of injection.

Directions

*Directions for the Application of
the Nicking Machine ; and
Explanation of the Plates.*

WHEN the hair of the tail is properly platted, and tied with a knot or two at the end, the pad, &c. as described in Fig. I. must be put on, and the machine, as in Fig. II. buckled to them, letting the part G in the machine lie over the part of the tail, that joins to the horse's rump ; then let an assistant, standing on the side rail of a brake, or any other convenience that may place him above the horse, raise the horse's tail very gently, till the knot of the tail gets so far beyond the strings L L in Fig. II, that it may be tied down, which being done, the tail may be let down lower, or taken up higher at pleasure. It is to be observed, that the ligature is not made on the tail itself, but on the platted hair, at the extremity of the stump.

The machine, Fig. II, must be made of a piece of tough wood, about a foot long, *viz.* from A to B, and about 19 inches broad from C to D, and 7 or 8 inches thick. The under part must be hollowed, so as to let in the horse's rump, and that the wings CD may rest on his buttocks. To receive the tail, a groove must be cut from G to H, about 3 inches wide and three deep at G, lessening gradually both in height and breadth to H. Holes must be made at certain distances in the groove, as at H for the string, and a nick cut to receive the billet from the strap K. Two buckles fixed to the machine as at I L.

The pad, &c. are sufficiently described in Fig. I, and its references: the wood must be sloped off from E to C and A, and so on the other side, to lighten the machine, and hollowed at B. G. F.

Fig. I.

Represents a horse with his tail in the frame, or machine. A is a pad,
to

to which is fastened a circingle B. CC two side straps, one on each side the horse, fastened to the circingle to keep the machine from going to either side; D a breast-plate, to prevent the pad, &c. slipping back. E a strap fixed to the pad, and buckling to the machine, to keep the tail on the stretch at pleasure. F the string tied on the hair, to confine the tail down to the machine.

Fig. II.

From A to B is 12 inches; from C to D measured with a string drawn over EF is 19 inches. From the top of the groove at E to the bottom G is 3 inches. From E to F, the widest part of the groove, is 3 inches, gradually narrowing, as a tail lessens to its extremity. The dots about H are holes in the groove, through which a piece of tape or pack-thread must be put, according to the length of the dock, and the distance of the knot, to tie the tail down behind the knot. I I the buckles, to receive a strap from the circingle on each side, as described
in

Directions, &c.

in Fig. I, which keeps the machine from turning to either side. K the strap with a billet and buckle, which comes along the back from the pad, and is fastened to the machine through a nick cut just above H. L L the strings to tie down the tail. B. G. F. the hollow to let in the rump.

Fig. III.

Represents the horse with the machine on, standing directly before you, where the depth of it is shewn, being three inches.

C. D. the extremities of the wings.
 * E. F. the upper part.



T H E

Pl. 1.

to front P. 334.



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2

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